



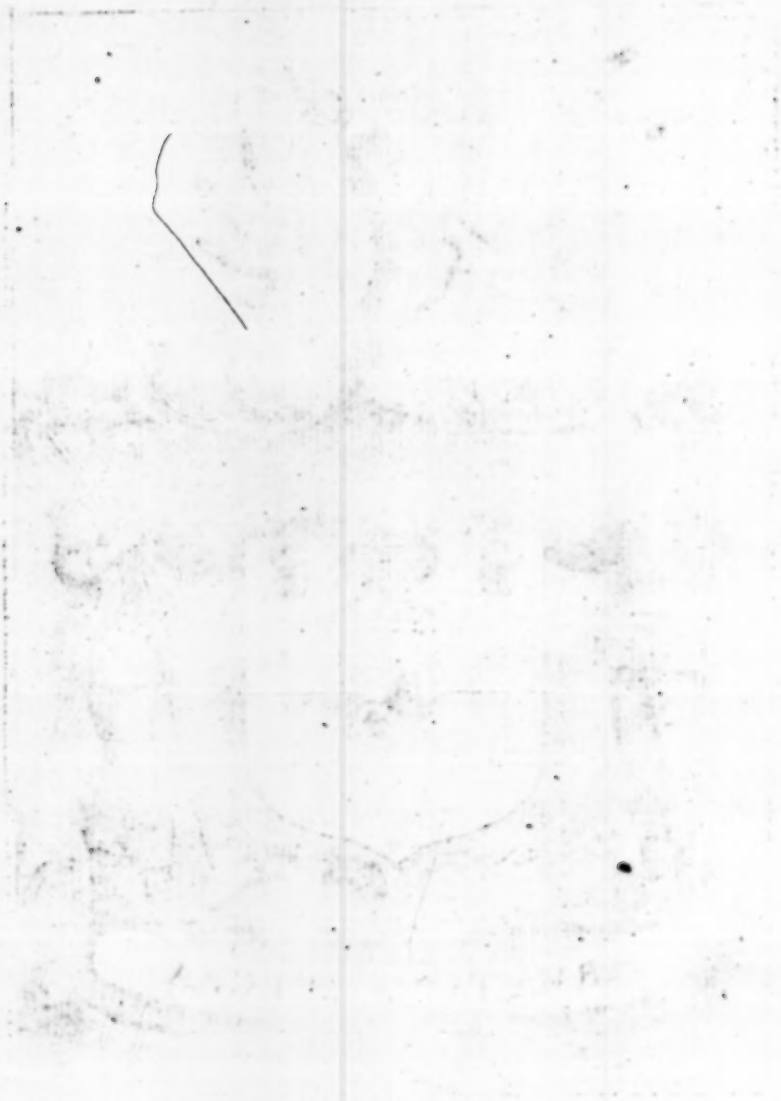
Though this Effigies here does Represent  
and Portray forth his faces Linament  
Yet Read his Booke and you therein will find  
that he hath Pictur'd there a Soldiers minde



Though this Effigies here does Represent  
and Portray forth his faces Linament  
Yet Read his Booke and you therein will find  
that he hath Pictur'd there a Soldiers minde







# MILITARIE DISCIPLINE:

OR THE YOVNG

## ARTILLERY-MAN.

VVherein is Discourfed and Shown  
the Postures both of *Musket* and *Pike*  
the Exactest way, &c.

Together with the Exercife of the Foot in their *Motions*,  
with much variety: As alfo diverfe and severall *Formes* for the  
*Embattelling* fmall or greater *Bodies*, demonftrated by the num-  
ber of a fingle *Company*, with their *Reductions*: Very ne-  
ceffary for all fuch as are Studious in  
the *Art Military*.

Whereunto is alfo added the Postures and Beneficiall Ufe of the Halfe-pike joyned  
with the *Musket*. With the way to draw up the *Swedish Brigade*.

---

The fourth Edition, Newly Revifed and Enlarged,

By

Lieut. Coll. *William Barriffe*.

---

Pfalms. 144. 1.

*Blessed be the Lord my ftrength, which teacheth my hands to warre, and my fingers to fight.*

---

LONDON, Printed by *John Dawson*. 1643.

*Bridgewater St. 1731*

*Gentle Reader,*

**I** Thought good to advertise you, that there is a very imperfect Coppie of this Booke published by one *Peter Cole* a ——— for his owne sinister ends, to the disparagement of my selfe, and the abuse of as many as shall take them for mine. I acknowledge no other for a true Coppie then this, which is corrected, and somewhat enlarged by mine owne hand, and should have had some further additions had not my imployment in the publicke affaires of the Kingdome letted me. Till I have leasure to doe that, accept of this, and although I cannot for the present prevent the injurie done my selfe, yet it is in your choise not to be wronged herein, being warned by

*Your Friend,* WILLIAM BARRIFFE.

*Done this 15.*

*June. 1643.*

TO THE  
RIGHT HONORABLE *ALGERNON*,

Earle of Northumberland, Lord of the Honours of Cocker-mouth, and Peter-ward,  
Lord Percy, Lucy, Poynings, Fitzpaine, Bryan, and Latimer, Knight of the Noble Order  
of the Garter, Lord High Admirall of England, Ireland and Wales and of the Dominions and Illes  
of the same, of the towne of Calet and Marbes of the same, of Normandy, Gascoigne, and Aquitaine, Lord  
Generall of the Navy and Seas, of the said Kingdome of England and Ireland: one of the Lords  
of his Majesties most Honourable Privy Councell and Lord Lieutenant  
of Northumberland, Cumberland, and Westmerland.

Right Honorable,

**T**He Glory of the Meridian Sunne is the more resplendently set off by the  
foile and darknesse of a Shadow, which is a perpetuall follower of his light:  
as my ambition in all humble service, is devoted to Your Lordship. The  
memory of so many Heroicall Ancestours, as (in all Ages) have ennobliz'd  
your potent Family, together with their Martiall and Renowned achievements, doe for  
ever stand recorded in the Book of Honour and Fame. And that (were occasion faire-  
ly offered) your honour hath Spirit and Bravery enough, in a Military emulation, to  
arrive up to the height of their glory: your constant and noble Deportments (as well  
in your private carriage, as of late in your publicke Triumph, when you were installed  
into that most Noble Order of the Garter) doe most evidently presage of you. This as  
it hath attracted all eyes and expectations: So hath it encouraged my low ambition  
(among the rest) to esteeme your Honour a fit Patron for a booke of this Nature.  
Your innate and inbred vertues, together with that Courtesie, Noblenesse, and Affability,  
(the inseparable Companions of anciently descended Honour) speake you so easie of ac-  
cesse, that my Young Artillery-Man despaireth not of acceptance and admission to  
kisse the hands of your Great Lordship. The first fruits it is, of my weake endeavours  
and the experiments of my private observations. Such as it is, my humble request  
to your good Lordship, that out of the accustomed freedome and goodnesse of your  
nature, you would be pleased to daigne acceptance of it: Even the acceptance and pa-  
tronage of this fourth Edition, as you pleased to doe of the three former. Which as  
it may be an ample testimony of the continuance of your Honorable favours to the Au-  
thour; So this my Dedication shall give assurance to the World of the continuance  
and redoubling of my former devotions and obligations, and how well I was pleased  
that so great a Peere vouchsafed the Patronage of the former. And I withall beseech  
your Honour, to give pardon unto that presumption, w<sup>ch</sup> hath proceeded from devotion.  
I confesse it an ambition in me, to soare loftily in my Dedication; But as Alexander  
(sometimes) refused not a meane Present of Fruit from the hands of a simple Gardi-  
ner: so my hope is, your Honour will hold me excused for offering so warthlesse and  
meane a Mite to so great and Honorable a Personage. Especially, considering that the  
subject of my Discourse is intended for the bettering of the Souldiers knowledge of the trai-  
ned Bands; and that your Lordship is one of his Majesties Lieutenants, it may prove a  
good inducement to your Honours liking (who are knowne to be so great a lover of  
your Countrey) to vouchsafe the protection and Patronage of these my endeavours,  
wherby I shall for ever stand obliged in all humility, and remaine.

Your Honours most humble and devoted Servant,

A 2

WILLIAM BARRIFFE.

To the Right Worshipfull, Sir Ralph Bosvile, Knight:

Captaine of a Select Company of Foote in the  
County of Kent.

**Y**ou may be pleased to remember (Noble Sir) how often you have importun'd me to write something (by way of instruction) for the bettering of the judgments of such young Gentlemen and Souldiers, whose minds stand this way affected. And although (for my owne part) I can better mannage the Pike than the Pen: yet that I might not be wanting in all acknowledgement, I have taken upon me to satisfie your request, which shall ever carry the authority of a command with it. Expect not (I beseech you Sir) to find my Book set forth with fine phrases, nor to be deckt with historicall discourses of forraigne fought Battailles; this being the onely thing by me intended in it, to set forth the exact grounds of this our moderne discipline, for the exercising of a foote Company. Nor is it to be esteemed a small advancement to the knowledge of the Art Military, even to have taught this little, seeing it must be confessed to have bene one of the chiefeft meanes, to make Philip from a poore Prince to become a powerfull Monarch; and his Sonne Alexander, a mighty Conquerer. I meane his exact observance of the true grounds of Military Discipline, which beginneth with the instruction of a private Company.

Adde hereunto (which I have also touch'd upon) his frequent practise, and inuring of his Souldiers to the Use of Armes, together with his well ordering and contriving the severall formes and figures of his Battels. Alwayes (by the way) observing how to make his advantage, either from the time, the number, or the place, or some other such like opportunity. But not to cloy your quainter eares with impertinent discourses: who are not onely a Master of Armes, but of Arts; also a Gentleman that hath bene Captaine either over horse or foote, for the space of these last forty yeeres: and from your very infancie brought up in the very bosome of the Muses. So that you are now become a Nestor for Counsell, an Apollo for Musicke, and a Mars for the Field. But lest by Acknowledging your worthy parts (your native modesty being such, that you never love to heare your own due deserved prayes) I purchase a frowne for a recompence: I forbear. My humble desire now is, that your Worship will be pleased to accept of my well meaning: and although I be wanting in Artfull expressions, yet to rest assured that I am yours in all humble and hearty affection, and shall still continue

Yours,

WILLIAM BARRIFFE.



# To all the Worthy Collonels; Lieutenant Collonels, Majors, and Captaines of the City of London.

Especially unto those that are, and continue Members of the *Artillery-Garden*.

The Right Worshipfull PHILIP SKIPPON, Esquire, Serjeant Major Generall  
of all the Forces of *London*, and Captaine of that Ancient and Worthy  
Society exercising Armes in the *Artillery-Garden*.

## Red Regiment

Collonell, *Thomas Atkins*, Alderman.

Lieut. Collonell, *Rand. Mainwaring*.

Serjeant Major, *William Tucker*.

1. Capt. *William Tomfon*.

2. Capt. *Edward Hooker*.

3. Capt. *Lawrence Bromfield*.

4. Capt. *Rich. Hunt*.

Coll. Capt. *George Niffe*.

## White Regiment.

Collonell, *Isack Pennington*, Lord Mayor of London.

Lieut. Collonell, *Robert Davis*.

Serjeant Major, *Thomas Chamberlaine*.

1. Capt. *Thomas Player*.

2. Capt. *Christopher Whickcott*.

3. Capt. *William Manble*.

4. Capt. *Joseph Vaughan*.

Coll. Capt. *Rubard Vinner*.

## Yellow Regiment.

Collonell, *John Wallaston*, Knight and Alderman.

Lieut. Coll. *Ralph Harrison*.

Serjeant Major, *Richard Culbert*.

1. Capt. *Robert Tubburne*.

2. Capt. *Walter Lee*.

3. Capt. *William Hirschcock*.

Coll. Capt. *John Brett*.

## Blue Regiment.

Collonell *Thomas Adams*, Alderman.

Lieut. Coll. *Francis West*.

Serjeant Major, *William Underwood*.

1. Capt. *Edward Bellamie*.

2. Capt. *John Hooker*.

3. Capt. *George Disford*.

4. Capt. *William Colefun*.

Coll. Capt. *Edward Clegatt*.

## Greene Regiment.

Collonell, *John Warner*, Alderman.

Lieut. Coll. *Matthew Foster*.

Serjeant Major, *Owen Roe*.

1. Capt. *Matthew Sheppard*.

2. Capt. *Francis Roe*.

3. Capt. *Robert Mainwaring*.

Coll. Capt. *Thomas Luxon*.

## Orange Regiment.

Collonell, *John Trewse*, Alderman.

Lieut. Coll. *Roseland Wilson*.

Serjeant Major, *Nathaniel Campfield*.

1. Capt. *Thomas Govey*.

2. Capt. *Richard Wallaston*.

3. Capt. *Miles Petrie*.

Coll. Capt.

## Right worthy Collonels and Captaines:

Although it is commonly found, that every man by a kind of affection loves to magnifie and most to extoll those things, whereunto he findes his minde most naturally inclined. Yet all such partiality and private affection layd a part, the love to my Countrey gave the first heate unto this Worke. And the rather I was induced thereunto, because I held my selfe obliged; that my small Rivolet ought to make an acknowledgement, or retribution to the Ocean, whence my poore Streames were first derived. And therefore in the first place to yourselves; who are the *Collonels, Lieutenant Collonels, Majors and Captaines* over the *Trayned Bands*, and are not onely the choicest flowers of our City, but also of the *Artillery-Garden*: unto whom I was first bebolding for the *Rules and Rudiments* of my *Military Instruction*.

And therefore Right worthy *Commanders and Captaines*, accept of this my acknowledgement; neither suffer any misconstruction to passe upon it, or to impute it otherwise than to my *gratitude*. For this fourth publishing of my worthelesse Work, I hope shall give none of you offence, by reason that I know it is your earnest desire that (if it might be) all his *Majesties faithfull Souldiers* and loving Subjects might be made perfect, both in the *practick and theory*, and all other necessary *Requisites* pertinent to the *Art Military*.

This is daily manifested unto us, by your frequent bearing of *Armes* on *General days*; whereby you not onely give a *powerfull* and good example to others, warming the *sterility* of the coldest *affections*; but like so many *stands of Imbellishment*, you garnish and adorne the *body* of our *Militia*. Perlist then *worthy Captains*, in to brave an intendment and *immortalize* your *Posterities*, by engraving your *Names* in the booke of *Honour*. who neither want *skill* nor *courage*, to merit with those, whose *legends* have filled the *Trumps* of *Fame*. But I have soared beyond the modest bounds of your *Depurments*, for which I crave your pardons: by which you will further indeere



## TO THE READER.

**C**ourteous Reader, although I have set forth this small *Treatise*, principally ayming at the benefit of my Country, yet I know that some will not be *wasting*, to disparage both the *Workeman* and the *Workes*, the matter and the *manner*. For such is the *misery* of the *times*, and the malice of men; that the frothy Depraver, (shall *found* in some men) an opinion of his *worth*, by detracting into other mens *merits*: For mine owne part I ingeniously confesse, that amongst many in our owne *Ground*, I was the meanest, both for skill and Schollership, to have undertaken a worke of this Nature, but being continually prest by my acquaintance: some for the *Pastures*, others for the *Motions*, and by some againe for *Figures*, I being alwayes willing to further men this way affected, granted and gave to some men Coppies, and suffered others to peruse my Notes, which I had placed in an old waste paper Booke. But at length, Time, and mens tongues together, had begot an opinion, that I had writ a Booke. Which was so freely divulged, that I was requested by some to know when it would come forth of the *Presse*, when as yet I had not the least *conceit*, to put Pen to Paper tending to this purpose. So that being engaged something in my credit, and with all requested by a Right Worthy Knight, then my Captaine, who had power to *Command*: and lastly, being thrust on by the importunity of some of my familiar friends: I have put my Card amongst the rest into the bunch to be shuffled: not much caring where it be dealt, so it be not mixt with the ———. If any carpe at the plainnesse of the *stile*, I conceive that it fits best with the Subject, workes of this Nature, chiefly requiring it. If such, whom opinion hath made proud, and custome, captious, shall happen to be my Supervisors, to them I say, that it is easier to finde faults than mend them, and to mend *Bookes* than to make them. But to the courteous and skilfull, whose better parts will yeeld better fruits, I shall request their favourable censure, and that with their judgements, they will mend what by over-sight I have mist. For which their loves, I shall ever stand engaged: and remaine

*Their thankfull Friend and Servant,*

WILLIAM BARRISTER.

## To my worthy friend the Author

**T**Hat commends too poorly doth dispraise,  
And those good parts he so commends, be-  
trayes:

A silent admiration is the best,  
When words fall short, whereby should be exprest,  
What we conceive, for faint and bare Commends  
Ment for a praise, misse utterly their ends.

*Ralph Bosvile, Knight.*

Ad Amicum suum ingeniosum, *Gulielmum  
Barriffe*, Authorem.

**Z**oile venturata jaculari cuspidè Lingua,  
Nil valet; hic veniunt Pallas & Arma simul.  
O quam festinus Liber hic, q'is Martis & Artis,  
Palladiæ sacro Numine intus eris!

To his much deserved Friend the Author.

**A**Souldier? and a Scholler? who did see  
*Mars* and *Minerva* both in one agree,  
Why, come and see, loe here is one hath spent  
His time in *Mars*'s, and the *Muses* Tent;  
Both Say, and Do, how few can? but here (lo)  
He that doth Say so much, can much more Do,  
By's Practise, and his Precepts thou maist see,  
And learn to Know, and Do as much as He.  
What others get with paines, charge, hazard, harms,  
Here may be learn'd with ease; the use of Armes.  
*Zeilus* may catch and carp, now here, now there,  
But thou't beyond his Tongue-shot, never feare;  
Thou that dost dread nor pikes, nor guns, nor swords  
Dread not the blasts of Barking *Momus* words.

Goe on my Friend, and let there spring from out  
*Artillery Garden* many such a Flower.

*Samuel Carleton,*  
Lieut. Collonell.

To my loving Friend the Author.

**H**omer æterniz'd is for writing, what  
*Achilles* and his *Amymidons* did at  
The Siege of *Troy*. I envie not his fame,  
But needs must furture Ages greatly blame,  
If they forget to Memorise thee too,  
That show it not what was done, but how to do.

Another of the same.

**O**V R *Author* now the fourth time treads the  
Stage

Of *Mars*: wherein he merits equipage  
With any he, that characteriz'd with pen,  
The neat'st Contrivements to Imbattell men.  
Woe's me, or him, or that State that shall misse  
A Brother, Friend, a *Man of War* like this.

This *Gardner*, that's adorned with more flowers  
of Discipline, then is the yeare with houres.

*Rowland Gwin,*  
Lieutenant.

On his much Honored friend the Author.

**A**S *London* (Englands farre fam'd Emporie.)

In her brave Garden of *Artillerie*;  
With reason glory may, because therein  
Is exercis'd exacter Discipline,  
By Motions and apt firings than is done,  
In any other place of Christendome;  
So may that Garden as deservedly,  
(*Accomplish Barriff*) joy and boast of thee,  
Although here still'd, *The Young Artillery Man*,  
Of thy abounding modestly, yet can,  
Thy skill or courage thereby vailed be  
No more, than Sun beames by a Tyffanie:  
Why young? Is't cause thou'lt still a Learner be?  
Even so must all that ayme at Excellencie;  
New accidents and expert mens direction,  
Brings th'art of warre still neerer to perfection.  
'Tis said great *Alexander* wept, for that  
He no more worlds could finde to sub, ugate,  
And yet if he before *Ossend* had beene,  
He might have easier wept then entred in;  
Because by late Experiments hee'd find,  
That Art, grown universall and refin'd,  
That Art of Arts which claimes the Diadem!  
As the prime meanes to gaine bright honours gem,  
And such whereby the *Romans* sword acquir'd,  
The worlds Monarchy, and so admir'd,  
And fear'd, it made them knowne to be, that all  
(Besides themselves) they did *Barbarians* call:  
All which addes to thy worth, for tutoring men  
Therein by Postures, Motions, Voyce, and Pen:  
And in a way so plaine, yet exquisite,  
And all comprising that is requisite

For

For forming of Choice Squadrons, that thy merit  
Will to the end of time renowne inherite;  
Because the skilful'it Leader can no more  
Then teach men how to fight (and march before)  
With best advantage; yet saw I thee doe  
A Captaines Office, and a Souldiers too,  
In first Commanding what thou would'it do; And  
Being first in executing such Command  
With such exact dexterity, as none  
Could say thou can'it short in perfection  
To Forraine Discipliners neere or far,  
Though dayly train'd up in the Schooles of War.  
Yet as th'art modest in thy Title, so  
Th'art in displaying what thou treat'it of too,  
For thou adorn'it not thy bookes Frontispiece,  
With glorious Titles to endear its price,  
As th'art of Warre, or Souldiers Academy:  
Nor more pretendest then a *Company*,  
O: *Squadrons exercise*: and yet a *way*  
To set a greater body in Array  
Thereby discover'it Onwards then, and steed  
Thy Nation, by supplying (at her need)  
Thy Country with large *Troopes* well disciplin'd.  
For which *Occasion* will hereafter finde  
A moane to *Crowne* thy merit. Whilst thy friends  
With thy *Designes* acquire their hop'd for Ends.

Ja. Haward ex hospitio Graienf, Arm.

To him much steeme I Friend, and so'om Souldier,  
tho Author.

**C**Ritick, observe thy distance, censure not,  
Nor spend thy judgement like an Ideot  
That nothing knowes; If knowing, know thou then  
Thou must be ranck't amongst the envious men.  
If once thou dost attempt to contradict  
The matter that this booke contains in it:  
The Methods plain; not deckt with complements,  
Those frivolous, idle, needlesse supplements,  
The substance ponderous is; no fond conceit  
Assents thee friend. With shame they shall retire;  
And so retreat, as not to charge againe.  
In Front, in Reere, or Flanke, Thou shalt disdain  
All Formalists, that faine would Souldiers seem,  
Who much expresse are in judgement green.

Andew Wharley, Ex hospitio Grai.

In Amicum Gulielmum Barriff.

**Y**Oung, and so old in *Marshall Discipline*?  
Liftrust will say, This worke is none of thine.  
But I that know it, will averre the same  
To be thine owne, and not anothers fame.  
A noble *Souldier* scorne to be to base  
By others Worth to purchase his own Grace.  
And such is *Barriffe*. What his Book doth speak,  
It is his own: let Envie swell and break.

Amicus H. Petow.

An *Anagram* and *Acrostick* on his loving  
Friend, *Lieut. Colonnell*

Anagramma. { *WILLIAM BARRIFFE*.  
I fill fame by Warre.

I f Lilly, Camden, and Leav'd Vdall's name  
F inds memory still, and fills the trump of Fame  
I n framing Rules for Youth, that might them teach  
L earn'd Arts in tongues above the common reach:  
L et then Wars rudiments, that here are brought  
F or: Englands good, by none be set at naught  
A nd scorn'd: for they in times will m ke renowned  
M en studious in this Art, and their acts crown'd  
E ndure: He that in Warre will seeke to gain,  
B e perfect-mist in all, and that retain.  
Y oung though our BARRIFFE be, yet this his Book,  
Will speak him old, if well therein you looke,  
A ll Postures for the Munket, and the Pike  
R eform'd are by him, and eke the like  
R efus'd in Motions all, they there do stand  
W ith fumes and firings framed to your hand.  
I n Band on in a Regimentall way:  
L ook here, and see a Figure form you may.  
L ove to his Country, and our Gardens fame,  
I n time prevail'd with him, to let this fame  
A gain to Presse be brought; O let not then  
M ad rage, rash censure of ground Ignorant men  
B e prevalent: but let the learn'd, the just,  
A nd like the noble: yea all those that must  
R enowned be, and will gaine Fame by Warre,  
R egard what's good, forbear harsh doom: then farr  
Y our Fama will fly, and we inconv'g'd shall  
F rom Barriff's Young Artillery Man seeke all  
F or honours wreath: and so fill fame by War,  
E v'n here in England, and abroad full far.

Thomas Whitley, Lieut.



# MILITARY DISCIPLINE,

OR

## The Young ARTILLERY man.

### CHAP. I.

*Concerning Postures and handling of Armes.*



He first Rudiments of education, wherewithall to enter young *Souldiers* which desire to be instructed in that part of the *Art Military*, which concerneth the *Infantry* (or *Foot-Souldiers*) ought to be the well manning and handling of their *Armes*; which may easily be attained by frequent *Practice*, and the *Souldiers* thereby be brought to use them with *ease*, *safety*, and *delight*: whereto the contrary (without exercise the easiest *Armes* become not onely troublesome burthens unto the *unskillfull bearers*, but too often prove dangerous and hurtfull both to themselves, and fellowes, that *range* and *file* with them. Neither need any be *discouraged*, for no man is born a *Souldier*, nor can attaine to any excellency in the *Art Military* without *practice*; But by *practice* is gained *knowledge*; *knowledge* begets *courage* and *confidence*; few or none being *fearfull* to execute what by frequent *practice* they have thoroughly learned.

And therefore it will be necessary for every one that intends any *proficiency* in this part of the *Art Military*, first to be instructed in the *Postures* and well handling of their *Armes*; (a thing much to be desired in our *Trained Bands*, though small hope of amendment, seeing that our *Souldiers* are scarce called forth to exercise either *Posture* or *Motion* once in foure or five yeeres. Whose the fault is, I know not: only I pray God that it may be amended, lest shame and infamy be the least of evils which our careless security may bring upon us: Yet pardon this digression, for my zeale to my Countries good had almost transported mee beyond the bounds of my intent, but of this no more. I will now come to the *postures* of the *Musket* and *Pike*; which some conceive, are fittest to begin from the taking up of their *Armes*, and arming the *Souldiers*, concluding them with the laying down of their *Armes*, or disarming them. Nevertheless, because that some (especially such as have been in the parts beyond the Seas) have not accustomed themselves to any strict observance of *Posture*; for the arming and disarming of the *Musketier*, but after the manner of the field come ready charged and shouldred, and so from thence making the entrance or beginning to the *Postures*; by which meanes others have beene emboldened too censoriously to object against the rest as superfluous: which they themselves at some time or other cannot avoid. Therefore to the end that they also may have satisfaction, I have so placed the *Postures* of the *Musket*, that they may make use of so many of them, as they shall think necessary, and leave the rest to such as require a more exact and ample satisfaction. But before I expose the *Postures* to the publike survey, me thinks I heare some already inquiring what is *Posture*? Wherefore, that I may satisfie them, and not be troublesome to others; In brieft thus,

*Posture* in a *Souldier* is the garbe or figure, that he useth in the handling of his *Armes*, consisting of severall *Motions* for achieving of each *Posture*. The *Motion* being the working part; the *Posture*, the alteration or act, either in circumstance or matter: As to rest your *Musket* being one *Posture*, to shoulder your *Musket* another, so likewise for the rest: Howbeit some perchance will object (as formerly hath been to one of *Athens*, making a long Oration in the praise of *Hercules* his valour) and say, who ever doubted of it? So to me, who ever questioned these for *Postures*? yet I have known them not onely questioned, but written against; peremptorily concluding that there are but three *Postures* to be used for the *Musket*: whose errors I shall easily confute. But more of this after the *Postures* of the *Musket*. Wherefore for the more orderly proceeding, conceive their *Armes* to lie before them on the ground; and then the first command will be, to stand to their *Armes*.

The definition of Posture.

The manner of Arming the  
Muskettier and Postures of  
the Musket.

Take up your } Bandeliers.  
Put on your }

Take up your } Match.  
Place your }

Take up your Musket and Rest.  
Rest your Musket.

Now if your please, you may  
performe your saluting Po-  
sture.

Payse your } Musket.  
Shoulder your }

Take your Rest into your right  
hand and you are armed ready  
to March.

Thus being armed, with Mus-  
kets shouldered, some account  
their Postures to begin from  
this place; wch may be done  
either standing or moving, as  
they successively follow.

Take your Match between the  
fingers of your right hand.

Put your Rest string about your  
left wrist, and carry your Rest  
in your left hand.

Return your match between the  
fingers of your left hand.

Unshoulder your musket & poise.

Joine your Rest to the out side  
of your Musket.

There is likewise the *sentinell posture*, which is, The muskettier having his Musket charged with  
bullet, his match cocked, his pan guarded, stands with his musket rested, ready to perform such duty as  
shall be commanded or given him in charge. Some have likewise taught to make ready on, or fix the  
*sentinell posture*: But note, that as none comes to stand *sentinell*, but comes ready charged; so if any  
occasion happen that he must give fire in the time of his standing *sentinell*, it causeth an *Alarme* to  
that quarter, or *Corps du guard*, so whence he is set out; so that he will have no fit time to make re-  
ady upon his Rest. Wherefore I conceive it superfluous; but will ever conform to better judgement.

We have also the *Funerall posture*, which from the Rest is to be performed at three motions, but  
cannot so well be exprest in writing, as it will expresse it selfe in action. Wherefore seeing that it is  
rather an Ornament to Obsequies, then truly necessary for Armies, I will not spend more time a-  
bout it, but come to the postures of the pike. Yet before I passe upon them, give me leave to answer  
some, which out of a critical humour will alwayes be carping at others, condemning these postures,  
saying, there are more by halfe, then are either good or usefull; and that there are no more postures  
to be used, but *Make ready*, *Present*, *Give fire*. The which we will not deny, that in service there are  
any other Commands *usefull*; notwithstanding I would have them to know, that *make ready* is no  
*posture*, but a word of command, including all postures, from the first arming of the Soldier to the  
present

Open }  
Cleere } your Pan.  
Prime }  
Stuns }

Cast off your loose Cornes.

Blow off your loose corns & bring  
about your musket to the left side.

Trail your Rest, and ballance  
your Musket in your left hand.

Charge with Powder.

Draw forth your Scouring

Shorten stick.

Charge with Bullet. (musket.

Put your scouring stick into your

Ram home your Charge.

Withdraw

Shorten } your scouring stick.

Return } (Rest.

Bring forward your Musket &

Payse your Musket and reco-

ver your Rest.

Thus having charged, some  
men will shoulder, and so from  
thence make ready; beginning  
their Postures, from the un-  
shouldering of the Musket: ac-  
counting of those past, as  
Motions of Posture: But  
they doe but tangle them-  
selves in their own snares:  
therefore I proceed.

Joyn your Rest to the outside of  
your Musket.

Draw forth your Match.

Blow your Coale.

Cock } your Match.

Fit }

Guard your Pan.

Blow the Ash from your Coale.

Open your Pan.

Present upon your Rest.

Give Fire breast high.

Dismount your Musket, joyning

your rest to the outside of your M.

Vncock and return your Match.

Cleere } your Pan.

Shut }

Payse }

Shoulder } your Musket.

Take your Match between the  
fingers of the right hand.

Take you Rest into your right  
hand, clearing your string from  
your wrist.

Return you Rest into the left  
hand, the string loose. (hand.

Return your match into your l. ft

Unshoulder your musket, & poise.

Rest your Musket.

\* Set the But-end of your musket  
on the ground.

Lay down your } Musket & rest  
Match.

Take off } your Bandeliers.

Lay down }

March from your Armies.

\* Set the  
But-end of  
your Mus-  
ket on the  
ground, some  
(though  
improp-  
erly) call Or-  
dering the  
Musket.  
The senti-  
nal Posture.

\* The Fu-  
nerall Po-  
sture.

\* Make  
ready, no  
Posture, but  
a word of  
Command.



present: or if the muskettire be charged, shouldered, or both, then the word (*make ready*) commands the prosecution of the rest of the Postures; which are between the posture you then immediately are at, when the Word is given, and the other Posture, Present: for which reason, when we teach Muskettires at first, it is most necessary to instruct them punctually, from Posture to Posture; which being once attained, they will manage their Armes more surely, more comely, with more celerity, and with better execution: and at the first may easily be taught the best way. But if they have once got an habit of being ill, there will be as much or more paines spent in reclaiming their errors, as at first to teach them the best, safest, and readiest way.

CHAP. II.

Of the Postures of the Pike.

That which followeth next of course is the Posture of the Pike. Wherefore that we may observe Order in our proceeding; we will likewise conceive their Pikes, to lie in like manner before them on the ground: And then, as before, the first command will be, To stand; to their Armes.

Handle } your Pikes. | To your } (a) Open } Order.  
Order } (b) Close }

Charge from the Foot.

Which is to Charge with the But-end of your Pike at the inside of your right Foot, your Pike in the left hand, drawing your sword over the left Arme.

Charge to the } Right,  
Left,  
Rear.

Order your Pikes, and put up your Swords.

Note that these Charges at the Foot are to receive a desperate enemy on Horse, upon a stand in some strait, or other place of advantage, the muskettires to give fire over the Pikemens heads, or elsewhere, at the discretion of the Commander.

From } Port } your Pikes } Order as you were.  
Order } Compost }  
Cheek }  
Traile }

Charge to the } Front }  
Left } Order as you were.  
Rear }

Shoulder your Pikes.  
Advance your Pikes.

From } Port } your Pikes } Advance as  
Advance } Compost } you were  
Cheek }  
Traile }

From Compost, Cheek, or Traile, the Pikeman may at the discretion of the Commander, charge either to the Front, Rear, or Flanks, as shall be necessary or thought expedient. I will doe it only once over, for the Charges will be all alike, whether you Compost from Order, from Advance, or Shoulder. And so likewise for Cheek and Traile, &c.

From Compost } Front }  
Charge to the } Right } Compost as you were.  
Left }  
Rear }

Check your Pikes.

From the Cheek } Front }  
Charge to the } Right } Check as you were.  
Left }  
Rear }

will customs hardly reclaimed.

Open Order in respect of posture for the pike, is when the pikemen stand at double distance, or open Order as the least; then the pikemen are to extend their right armes, and place their Pikes about a foot to the right of their right legs: it is usefull only to make a gallant shew. Close order is to place the But-end of the pike on the inside of the Foot, and is only usefull upon a stand, to receive and abate the fury of the Horse, upon a desperate charge. Charge to the rear is to be made in flood all ways to the left about, because it is three times a better way then charging to the right about.

Trail your Pikes.

From the Traile }  
Charge to the }  
                    } Right }  
                    } Left }  
                    } Rear }

Trail as you were.

Order

Lay down

} your Pikes.

I shall undergoe the censure of some, for that they will finde more *Postures* of the *Pike* here then formerly they knew of, and so by their conclusion more then there is any need of; for now adales there are such that will limit the *Discipline* of the *Militia* to the verge of their own knowledge; and whatsoever else they shal see either *alled*, or written by others, that is without the lists of their *kenning*, they will peremptorily conclude for superfluous and improper, howsoever I shall alwayes referre my selfe to the judgement of the more judicious.

The use of  
the Pike.

The *Charges* of the *Pike* are *sawfold*, either for *Defence*, or *Offence*. *Charges underhand* or *overhand*; but divers and different they are from their severall *ways*, and *Postures* from which they are, or may be done, although they are not all alwayes *usefull*, yet at sometimes they may bee *usefull*, and therefore very requisite to be known to all such as either are, or at least would bee accounted for good *Souldiers*.

As I have set down the *Postures* themselves both of *Musket* and *Pike*, so it were not amisse, if that the *Motions* of *Posture*, were likewise here exprest. But because they will take up too much time, and fill too much paper, & the subject it self not pleasing unto many, I will spare my labour, and my Book the lines, rather suffering the censure of curtaild brevity, and tedious prolixity.

### CHAP. III.

#### Of the Drum.

Our *Souldiers* being sufficiently instructed in the *Postures* of such *Armes* as they carry, (or are appointed to use :) the next thing they are to learn is the knowledge of the severall *beats* of the *Drum*, which is as requisite to be learnt of the *Souldier*, as any thing else in this way. For the *Drum* is the voice of the *Commander*, the spur of the *valiant*, and the heart of the *coward*; and by it they must receive their directions, when the *raring Canon*, the clashing of *Armes*, the neighing of *Horses*, and other confused noise causeth, that neither *Captaine*, no other *Officer* can be heard. Therefore it will bee necessary that every *Souldier* should learn these six severall *Beats*, viz.

1. A Call. 2. A Troop. 3. A March. 4. A Preparative. 5. A Battaille. 6. A Retreat.

A. Call.

1. By a Call, you must understand to prepare to heare present Proclamation, or else to repaire to your Ensigne.

A. Troop.

2. By a Troop, understand to shoulder your *Muskets*, to advance your *Pikes*, to close your *Ranks* and *Files* to their Order, and to troop along with (or follow) your *Officer* to the place of *Randevous*, or else where.

A. March.

3. By a March you are to understand to take your open order in rank, to shoulder both *Muskets* and *Pikes*, and to direct your March either quicker or slower, according to the beat of the *Drum*.

A. Preparative.

4. By a Preparative you are to understand to Close to your due distance, for skirmish both in rank and file, and to make ready, that so you may execute upon the first command.

A. Battaille.

5. By the Battaille or charge, understand the continuation of pressing forward in order of battaille without lagging behinde, rather boldly stepping forward in the place of him that falls dead, or wounded before thee.

A. Retreat.

6. By a Retreat, understanding an orderly retiring backward, either for reliefe, for advantage of ground, or for some other politicall end, as to draw the enemy into some ambuscament, or such like. Much more might be written concerning the *Drum*, but this may suffice for the present.

CHAP.

## CHAP. IV.

## Of Ranks and Files, their places and dignities.

**N**OW that our Souldiers are somewhat skilfull in managing of their Armes, and no lesse capable of the severall beats of the Drum, it is high time for them to know the difference between a Rank and a File. Wherefore know, that a Rank is a row of men, sometimes more, sometimes fewer, standing, moving, or marching even a breast, or (as some write) pouldron to pouldron, or shoullder to shoullder. A File is a sequence of men, standing one behind another, back to belly, in a straight line from Front to Reere, consisting sometimes of 6, 8, or 10 men, on some occasions the Spaniards makethem 12 deep. But when any one would shew much variety of exercise, then 8. will be the more pliant and dividuall number, yet for service in the Field, where men are not altogether so expert (as I could wish our Countrey-men were) 10. men is a fit number, not only for the cause aforesaid, but also because that 10 is the square Root of a 100. and is a convenient number to draw Companies into grasser bodies.

And now I think it would not be much amiss, if I should here insert the severall places of dignity and precedency in Rank, as also in File. Wherefore because that Files are first to be drawn forth, and that by adding or joyning of Files together, Ranks are made; we will begin first with the precedence of Files. Therefore conceive their dignities according to the Figures (or Numbers) hereunder placed, first in File, then of Rank, lastly of both conjoynd.

## Front.

Front.	Number of dignity.	Number of dignity.
1. P 1.	2 6 7 3 4 8 5 1	1 6 7 3 4 8 5 1 0
2. P 5.	P P P P P P P P	P P P P P P P P 1
3. P 8.	8 7 6 5 4 3 2 1	8 7 6 5 4 3 2 P 5
4. P 4.	Number of place.	Number of place 3 P 8
5. P 3.	Number of dignity.	4 P 4
6. P 7.		5 P 3
7. P 6.		6 P 7
8. P 2.		7 P 6
Reere.		8 P 2

It will not be (of it self) sufficient that I have here both marked and figured each single worth; thereby pointing out the severall places & dignity, proper to each particular man, in his file & rank: but it will be expected of some, that I should back my Conclusions, either with sound and solid reasons of mine own, or at the least with the concurring opinions of others. But as for such, who have employed themselves upon this Subject, either for want of due consideration, or a rational understanding the parts of a File, they have voted their judgements as divers as their number; each man having a fancy to his own way. And if it were much material, I might here demonstrate unto you the severall opinions of *Leo, Robertellus, Count Maasfield, Sir Tho Kellie*, and many others: but their works being extant, I will spare the labour. Nevertheless I will say thus much, that *Captain John Bingham*, although somewhat obscurely, yet, in my judgement hath best delivered himself concerning this particular: which although he hath express by way of *Tetrarchies* and *Mirarchies*, the same may be understood as well by Ranks and Files. His words are these: "Every Tetrarch is over foure Files, in all which the Commander that hath the right, hath the first place; he that hath the point of the left, the second place; he that standeth on the right hand next to him, the third place. The last place is him that standeth next to the Commander of the right point on the left hand: He demonstrates it by way of figure thus.

B 1.

Right.

what is a rank.

what is a file.

where men are expert, 8 is a sufficient depth, and may better keep their order then when they are dexter.

\* In placing your men, first draw your Souldiers forth in files, and not in ranks, as some have usually used.

\* A Rank set out in his name, but none of his.

\* In the Tetrachs of Helias, l. 1. it is no. 1 of the tenth chapter.

	P.M.M.	M.M.P.	P.M.M.	M.M.P.	
Right wing	1 5 1	4 8 4	3 7 3	2 6 2	Left wing.
The Middle.					

## CHAP. V.

Reasons for precedency of dignity in Ranks and Files.

I Shall now endeavour to give some reasons for these severall places of dignity in Ranks and Files. And first for that Geometrical proportion gives both life, and being, to orderly discipline, consider that all parts of the body, ought to be answerable. Wherefore seeing that the joining of Files and Ranks produceth greater bodies; it is necessary that a true proportion should be kept from the beginning: and that in drawing forth of files, they observe to make the reere half file answerable in skill and worth to the front half file: and that the file leaders, and half ranks of the left flank should be equivalent in worth, skill, and valour to the right flank; that the reere division hold like proportion with the front division, and that all parts of the body be balanced with true



proportion, so near as the knowledge of the soldiers, and the number of the men will give you leave; and that there may be correspondency in their worth, place, and dignity, you may observe by adding the figures of number together, which are in the margin, where you shall finde, that the dignity being added together of the front half file, makes the number of 18; and the worth of the reere half being in like manner added, makes the like number. So also shall you find the dignity and worth of the file leaders of the left flank to paralel the worth of those on the right flank by the same rule. If you will have it yet more cleare, observe that the file-leader is the chiefe in his file, the bringer up the second, the half-file leader the third, the last man of the front half-file the fourth. Now note, that as the worth of the first precedes the second, so the worth of the third exceeds the fourth: Adde the first worth to the fourth worth, and that makes five; adde the second worth to the third, and it makes the same number: so that there is equality throughout the batall both in front, reere, and flanks: for it were unreasonable, that all the chiefmen should be on the right flank, and all the worst on the left; for the left must be opposed to the enemies right. The file leader ought to be worthiest, because he hath the command of his file, and marcheth first against his enemy. The bringer up ought to be the second, because his place of march is in the reere, and is in most danger, should the enemy charge on that part: the half file leader is the third in honour, because that when the half file is taken off upon any occasion, he is the leader (unless they be commanded to face about) the last man of the front half file is the fourth in dignity, for when the reere division is taken off, then he is the bringer up, or the file being faced about, he is the half file leader to the reere: the next man to the file leader hath the fifth place of honour, for that one doubling brings him into the front: the next man before the bringer up hath the sixth place of honour, for that if the body be faced about, one doubling brings him into the front accidentally, or keeping the proper front by once doubling of ranks, he becomes bringer up to his file leader: the seventh place of honour is his that marcheth next after the half file leader, for that when the half files double the front, or marcheth forth, then one doubling ranks him even with the front: the eighth and last place of honour is his that is the third from the front, the file being but eight deep, which may also be made a file leader though with more trouble than the rest; for by counter marching front and reere into



the midſt, and then facing to the former front, and after doubling of ranks, makes him likewise a file leader. Now, as every mans dignity is more or leſſe in his file, ſo is all his rank with him. Wherefore this that hath already been ſaid, may ſuffice to inform thoſe which as yet are ignorant of the ſeverall places of dignity, both in rank and file. Nevertheſſe, for the clearer demonſtration of theſe rules of dignity, and for that they are of more concernment then at firſt every man can imagine, I have drawn forth three tables. The firſt of ſix deep and ſix abreſt: the ſecond of eight deep, and eight abreſt: the third of ten deep, and ten abreſt: which will ſhew the particular dignities due to each man in rank and file. I have alſo added three other ſquare tables: the firſt of thirty ſix men, the ſecond of ſixty four, the third of one hundred. And in each table I have ſhewed every mans place of dignity in file and rank, as alſo in the joynd body, from the firſt and chiefeſt to the laſt and leaſt in dignity, by figures of number, with an addition of their ſums together, to ſhew their uniformity, and proportion to each other.

The places of Dignity of 10 in Rank.

2	6	10	7	3	4	8	9	5	1
---	---	----	---	---	---	---	---	---	---

The places of Dignity of 8. in Rank.

2	6	7	3	4	8	5	1
---	---	---	---	---	---	---	---

Places of dignity of 6. in Rank.

2	6	3	4	5	1
---	---	---	---	---	---

Rules of Dignity ought not to be regulated by i<sup>n</sup> ſtillies, conceited opinions, and liſt grounds; but by truth and reaſon.

5	8	4	3	7	6	2
---	---	---	---	---	---	---

The places of dignity of 8 in File.

5	9	8	4	3	7	10	6	2
---	---	---	---	---	---	----	---	---

The places of dignity of 10 in File.

The Table of Dignity for 36 men.

	48	60	51	44	57	45	
11	2	6	3	4	5	1	10
83	26	30	27	28	29	25	82
65	20	24	21	22	23	19	64
47	14	18	15	16	17	13	46
101	32	36	33	34	35	31	100
29	8	12	9	10	11	7	28
	54	66	57	60	63	51	

The Table of Dignity for 64 men.

	120	136	140	124	128	144	132	116	
18	2	6	7	3	4	8	5	1	18
146	34	38	39	35	36	40	37	33	146
242	58	62	61	59	60	64	61	57	242
114	26	30	31	27	28	32	29	25	114
82	18	22	23	19	20	24	21	17	82
210	50	54	55	51	52	56	53	49	210
178	42	46	47	43	44	48	45	41	178
50	10	14	15	11	12	16	13	9	50
	120	136	140	124	128	144	132	116	

The

## The Table of Dignity for 100 Men.

	30	25	20	15	10	5	4	3	2	1	
48	3	6	10	7	3	4	8	9	5	1	27
238	42	46	50	47	43	44	48	49	45	41	227
428	82	86	90	87	83	84	88	89	85	81	427
378	72	76	80	77	73	74	78	79	75	71	377
178	32	36	40	37	33	34	38	39	35	31	177
128	22	26	30	27	23	24	28	29	25	21	127
328	62	66	70	67	63	64	68	69	65	61	327
478	92	96	100	97	93	94	98	99	95	91	477
278	52	56	60	57	53	54	58	59	55	51	277
78	12	16	20	17	13	14	18	19	15	11	77
	30	25	20	15	10	5	4	3	2	1	

Files pre-  
cede each  
other in dig-  
nity accord-  
ing to their place.  
Each man  
in the right  
hand file,  
precedes him  
of the same place  
in the left  
hand file  
which  
makes the  
difference  
of number  
between  
them 6 at 6  
deep, 8, at  
8 deep, &c.  
The dif-  
ference be-  
tween every  
next  
rank of  
dignity, in  
the table of  
36 is the  
same num-  
ber.  
In the ta-  
ble of 42,  
the dif-  
ference be-  
tween the  
next ranks  
of dignity  
is 64.  
In the table  
100, the  
difference  
is the file  
number of  
10, &c.

If you please to make an experiment of the *uniformity* and *proportion* that one file or rank holdeth with another, and would first make trial of a file, then add the number of one file together, (which done) add the numbers together of the next file in dignity, into one sum: Then subtract the lesser number out of the greater, and you shall always finde, that one file preceeds the other no more then there are particular places in a file: as 6 in files of 6 deep, 8 in files of 8 deep, and 10 in files of 10 deep, the which makes no disproportion, but are only numbers of distinctions.

Would you make an experiment between the *dignity* of rank and rank: then, as before, add the simple numbers together of one rank, the which being found, add the simple numbers together of the next rank in dignity: The which in like manner being performed, subtract the lesser number out of the greater, and you shall find the remainder always to be the compleat number of the square body. \*As for example in the table of thirty six, add the numbers of the first rank (or file-leaders) together, and you shall find by addition twenty one; add the numbers of the second rank in dignity (which are the bringers up) together, and you shall find fifty seven. Then subtract the number of the first rank from the second in dignity, and the remainder will be thirty six, the just number of the whole square. And so in like manner is the number of difference, between every two next ranks of dignity in that table. The other table in like nature, having the same difference, according to the number of the body: either of thirty six, sixty four, or one hundred. But I doubt I shall be blamed for tedious curiosity; because I have insisted longer upon this *Su-jest* then at first I intended, which makes me the more willing (though somewhat abruptly) to break from it; and come to shew the manner of *joyning* or *drawing up* of files into *Battalia*: To which purpose the *Serjeants* are first to draw forth their files, and after to lead them up into order, according to every mans worth and honour; as first, the right-hand file, then the left-hand file, and for the other files successively within them, according to their severall worths and places: as by the following form, and the figures of number, you may plainly perceive.

Front



Left Flank. Number of place.	Front.									
	Dignity of place.									
	0	2	6	7	3	4	8	5	1	0
	1	M	M	M	M	M	M	M	M	1
	2	M	M	M	M	M	M	M	M	2
	3	M	M	M	M	M	M	M	M	3
	4	M	M	M	M	M	M	M	M	4
	5	M	M	M	M	M	M	M	M	5
	6	M	M	M	M	M	M	M	M	6
	7	M	M	M	M	M	M	M	M	7
	8	M	M	M	M	M	M	M	M	8
	0	8	7	6	5	4	3	2	1	0
	Number of place.									
	Rear.									
	Right Flank. Dignity of place.									

If there be any that shall say these are niceties, and of no repute amongst *Souldiers*, I dare say they have been well reputed of by good *Souldiers*; no disparagement unto the *fault-finders* (if there happen to be any such.) As for the noble, worthy, & well-knowing *Souldiers*, I am almost confident that out of their true-speaking judgments, they will either conclude that it is so used, or at the least, that it ought so to be; but if this can work no effect with the— I leave every man freely to his own judgment, desiring the judicious always to hold a favourable opinion of my well-meaning.

CHAP. VI.  
Of severall distances.

NOW that our *Souldiers* have attained some small knowledge in the use of their *Armes* (me thinks like some of our \* little knowing *Souldiers* of the *Trained Bands*) they already begin to be ambitious of *file-leaders* places; therefore that their own *weaknesses* may light them to read their own *follies* we will see how they will behave themselves in the exercise of the Company. Where the first thing we are to instruct them in, is their *distances*. But because it is disputable, whether *distance* be one of the *Motions* or no: we will first declare what *distance* is. To which I say, that indeed \* *distance* it self is no motion, but there is motion in producing such *distance*; for *distance* is the space of ground between man and man, either in *file*, or *ranke*, having relation only to the place between each party. All the rest of the *motions* having not only relation to the one, but to the other. Wherefore, not to spend more time in a matter so apparent, we will say that the *discipline* of a foot Company consists chiefly in *distance* and *motion*. And therefore seeing that *distance* is the forerunner of *motion*, and that \* no motion can be performed without *distance*, we will leave to discourse it, and fall to the matter it self, and shew how many sorts of *distance* is ordinarily used in our *moderne discipline*, which are these four hereunder named, viz.

Close Order,	which is	One foot and a half.
Order,	both in	Three foot.
Open Order,	Ranke	Six foot.
Double Distance,	& File	Twelve foot.

It hath been the opinion of some ancient Commanders, that the *distance* of *ranke*, was always double the *distance* of *file*, although they went both under one and the same denomination. As that order in *file* was three foot, order in *ranke* six foot, open order in *file* six foot, open order in *ranke* twelve foot, & so of other *distances*. But the best received opinions hold the to be alike both in *ranke* & *file*.

There is to be considered in *distance*, these three especially, that is, *Distance for March*, *Distance for Motion*, and *Distance for Skirmish*.

\* Ignorant  
Souldiers  
most am-  
bitious.  
• Distance  
it selfe is  
no motion.  
• Without  
distance  
no motion  
can be per-  
formed.  
Distance of  
ranke is to  
bee under-  
stood be-  
tween ranke  
and ranke.  
Distance of  
file is to be  
understood  
between  
file and file.  
The exact  
place from  
whence to  
measure  
your distan-  
ce is from the  
Center of  
your men,  
whether it be  
ranke or  
file.  
These 3 di-  
stances pe-  
culiarly re-  
markable.

You

You are to observe, that your distance for march is to be three foot between file and file, and six foot between ranks and ranks; distance for motion six foot both in ranks and file; distance for intricate doublings, wheelings, and skirmish, three foot in ranks and file. Close order is usefull for your files of Pike-men, when they are to receive a Charge from the horse: that so they may stand the stronger, by so much as they are the closer serried together: as also for the ranks of Muskettiers, when they are to poure on a salve of shot.

It next followes, that I shew the divers words of command, and direction; for the severall openings and closings of ranks and files. But I shall first recommend to the care of the curious Disciplinier; that in the first place he command his Souldiers to even their ranks, and streighten their files: to be silent, and attentive to their words of command, and direction: which being performed, the words of command for distance, are as followeth.

In motion of files you are to observe your Leader.

In motion of ranks you are to observe your right hand man.

Observations for the opening of ranks and files.

Observations for the closing of ranks and files.

Ranks and files to your close order.  
Files open to the right } to your order.  
Ranks open forward }  
Files open to the right } to your open order.  
Ranks open forward }  
Files open to the right } to your double distance.  
Ranks open forward }  
Files close to the right } to your open order.  
Ranks close forward }  
Files close to the right } to your order.  
Ranks close forward }  
Files open to the left } to your close order.  
Ranks open backward }  
Files open to the left } to your order.  
Ranks open backward }  
Files open to the left } to your open order.  
Ranks open backward }

Files open to the left } to your double distance.  
Ranks open backward }  
Files close to the left } to your open order.  
Ranks close backward }  
Files close to the left } to your order.  
Ranks close backward }  
Files } open } right and left } to your open  
Ranks } to the } front and reere } order.  
Files } open } right and left } to your double  
Ranks } to the } front and reere } distance.  
Files } close } right and left in- } to your open  
Ranks } to the } ward midst— } order.

Note that when files open to the right, the left hand file must stand fast, every file taking his distance from the file next his left hand: And when they open to the left, then the right hand file stands, every file taking his distance from the file next his right hand. Observe also, that when ranks open forwards, then the last rank stands, every rank taking his distance from the rank next behind him: And when they open backwards, then the first rank is to stand, every rank to take his distance from the rank next before him. You are likewise to take notice in the action, that you are either to face to the right, or to the right about.

Note also, that in closing of files, if it be to the right, then contrary to the opening, the right hand file stands, the rest closing to the right, taking their distance from their next right hand file. If you close to the left, then the left hand file stands, the rest of the files closing to the left, taking their distance in like manner. When files close to the right and left, then they close inward, taking their distance from the files within them, nearer to the midst of the body. Also note, that when files are commanded to open to the right and left (or by division) it must be outward. If ranks close to front and reere, then the first and last rank stand, the others taking their distances from them. If they close ranks towards the center or midst, then they close towards their two middlemost ranks.

It is not required that every Captaine or other Officer that shall exercise a Company, shall use all these severall openings and closings which are here exprest, but rather that he shall make use of so many of them, as he shall think fit for his present occasion or exercise: although they all may be usefull at some time or other. I may spare examples, for it must needs be apparent to the meanest capacity.

## CHAP. VII.

*Of Marching the Company in Divisions, with the order and places of the Officers and Drums.*

Front.

C.

MMMM

MMMM

MMMM

D 3

MMMM

MMMM

MMMM

MMMM

MMMM

E.

P P P P

P P P P

P P P P

D 1

P P P P

P P P P

P P P P

P P P P

P P P P

S. 1.

P P P P

P P P P

P P P P

D 4

P P P P

P P P P

P P P P

P P P P

P P P P

S. 2.

MMMM

MMMM

MMMM

D 3

MMMM

MMMM

MMMM

MMMM

S. 3. MMMM

L.

Our *Souldiers* now being somewhat expert in their distances, we will next draw them forth into a deep *March*. Wherefore note, that our *Files* must bee at *Order*, and our *Ranks* at *open Order*: the *Muskettiers* of the right flank are to make the *Vanne*, and to march next after the *Captaine*: The *Pikes* are to make the *Battell*, and to march after the *Ensigne*, either in one or two *Divisions*, according to their number. The *Muskettiers* of the left flank (sometimes called the second *Division* of *Muskets*) make the *Rear Guard*, which is led commonly by the second *Serjeants*. Howbeit if there bee but one *Division* of *Pikes*, then the eldest (or chiefeft) *Serjeant* leads the second *Division* of *Muskettiers*. If the *Company* bee but small, then it is best to make but two *Divisions*, one of the *Muskettiers*, another of the *Pikes*; For the placing of the rest of the *Officers*, you may perceive by the *Figure* in the *Margent*: Wherefore note, that M. stands for *Muskets*, P. for *Pikes*, D. for *Drummes*, S. for *Serjeants*, E. for *Ensigne*, L. for *Lieutenant*, and C. for *Captaine*.

Note, if you have but three *Drummes*, then let the *Drumme* in the second *Division* of *Pikes* bee wanting: If only two, then upon a *March* the first betweene the third and fourth *Rank* of the *Front Division* of *Muskettiers*. The second betweene the third and fourth *Rank* of the second *division* of *Pikes*.

Note, that betweene each *Division* in *March*, there ought to bee twelve foot distance, six foot before the *Officer*, and six foot behinde him.

C 2

CHAP.



Distance of place, and motions of the body, are a part of the *art military*, used for the *instruction*, and *discipline* foot souldiers: whereby to fit and enable them, to the *quick*, *true* and *orderly* performance of all *formes*, and *figures* of *bataille*, as may best suit with the *time*, *number*, *place*, and *discretion* of the *Commander*. And may rightly be divided in these *five* generall heads, (*viz.*) *distance*, *facings*, *doublings*, *countermarches*, and *wheelings*, which have (not unaptly) been compared to the *five vowels*: For as without one or more of the vowels, no word can be spelled, so without one or more of these, neither *forme*, nor *action* can be performed.

## CHAP. IX.

*What is meant by Facing, with the use of the word, whether to be used or refused.*

BEFORE we come to shew the variety of *Facings* in the action, I think it will not be amiss to speak a word or two in the way of *definition*: what is meant by *Facing*? To which I answer, That *Facing* is a particular turning of the *Aspect* from one part to another, whereby the *Front* proper becomes a *Front* accidentall: And a *Front* accidentall, may be reduced to his proper *Front*. There are some so seemingly curious, that by no means they will allow of the word *Face*: Concluding it altogether unnecessary; And no other word must be given, but, To the *Right*, to the *Left*, &c. Yet I wonder that men will stumble at so small a *straw*, which cannot chuse but be better used than refused. For the word *Face* is but one syllable, and quickly pronounced, and gives so clear an expression of the intent of the *Commander* that it concludes it necessary. As for example, Should you command a *Company* to *double Rank* to the *right*, and then command them *as they were*, and then say To the *left*, it might puzzle a good *Souldier* at the first to discern whether he should *face* or *double*: The like mistake might be among *Countermarches*: Wherefore I conceive that none can justly tax it for superfluous, <sup>a</sup> seeing the easiest expression hath alwayes been accounted for the best. Yet spare me, for my intent is not to overway any man in his opinion, but rather to deliver mine; leaving all men freely to their own likings.

If my intent were to make a great Book with a little matter, I might then here insert *figures* for every particular *Facing*, and their *Reducements* to their first *Posture*, which would take up divers sheets of paper, and to little purpose. For I suppose that every Man that knows any thing, may easily conceive the *Idea* of any ordinary *Facing* in his minde. Wherefore I will shew but one or two of the hardest. You are to observe that for the true performance of *Facings*, every Man is to turn upon the *Ball* or *Center* of the *left foot*, and to move from the ground onely with the *right*. The *left foot* being the keeper of *rank* and *file*.

Face to the	Right	} Face as you were.
	Left	
	Right and left	
	Right about	
	Left about	
	Right and left inward	
	Right } angle	
	Left } angle	
	Four Angles	

The word Face necessary to be used.

<sup>a</sup> The easiest and plainest instructions are alwayes to be preferred in the teaching young Souldiers.

<sup>b</sup> In the exercise of this motion of *Facings*, you are to be as open Order, in Rank and File.

when you face to any hand in the reduction you are to return by the contrary.

The *front halfe files* standing, it will be requisite for the *hase files* to the *Rear*, to doe as much by themselves: whereby, they will the more aptly perceive, how that the *Subdivision* goeth under the denomination of the *halfe files*, &c.









## CHAP. XI.

Of Doublings, their use and parts.

Doublings of Ranks always extending the length, either in number, or place, or both.

Doublings of files (or flanks) always extending the depth, either in number, or place, or both.

Note, that the distance for particular, and divisional doublings is open order in rank and file. Note also, that the ordinary doublings of ranks and files is or ought to be performed by three steps, first stepping forth with that foot which is next unto a place named and in the reduction return by the contrary band.

Note that in doublings of ranks and files, if you double

**D**oublings are to most excellent and singular good use for the strengthening of any part of the Battell, according to the occasion, or discretion of the Commander, and consists of these two generals; Doublings of length, and Doublings of depth, all times in quantities of number, sometimes both in number and place, both having this restriction, to bee doublings of ranks or flanks. Every particular doubling pointing at one of these, although there be sundry and divers ways for the doing of them, each of them being to very good purpose, for some consideration or other. Doublings of Ranks, from what forms soever it be done doth make the number double so much as it was before, and sometimes doth extend the length of the Battell so double the proportion of ground as well as number.

Doublings of files (or flanks) doe also double the number in depth, and sometimes becomes a doubling both of number and place. Wherefore for the better understanding of doublings, observe with me these six usuall ways following.

The severall parts or branches of Doublings.

Doublings of	Ranks.	1	Doublings of	The Reere.	4
	Halfe-Files.	2		Files.	5
	Bringers-up.	3		Halfe-Ranks	6

The first is the doubling of Ranks, and is when every even Rank doubleth into odd. The second is, when the halfe files double their ranks forwards into the front. The third, when the Bringers-up, double their ranks forwards into the front. The fourth, when the Front-half files double the Reer. These first four being doublings of Ranks, the length of the Battell being by them extended either simply in number, or both in number and place. The next two are doublings of flanks: the first whereof is the ordinary Doublings of files, every one of the even files being inserted into the odd files, accounting from the hand named. The next is, the doubling of halfe ranks, which is to be understood when one flank doubleth the other, either by passing through, countermarch, doubling entire, or divisionall.

You are to note in this motion of doubling, that as there is one part of the body stands, so the other part moves: the standing part is to be doubled, the part moving, are those that double, as you may perceive by the Figures, which shew the manner of each doubling. That which next followes are the words of Command, and direction for doublings, with the severall reductions following next after them.

The words of Command for Doublings, with the Reductions.

Ranks } Right } double } Ranks as you were. | Files to } Right } double } Files as you were.  
to the } Left } the } Left }

Bringers up, double your Ranks forward to the right.

Bringers up, face about to the left, march forth into your places.

Bringers up, double your ranks forward to the left.

Bringers up, face about to the right, march forth into your places.

Files to the right } outward. } Files as you were.  
and left double } inward, }

Halfe-files double your ranks forward to the right.

Halfe-files face about to the left, march forth into your places.

Halfe-files double your ranks forward to the left.

Halfe-files about to the right, march forth into your places.

Front half files } and double the reere to the  
face about to } right.  
the left } March forth into your places.

Front half files } and double the reere to the  
face about to } left.  
the right } March forth into your places.

Front

Front half-files counter-march to  
the right  
Front half-files counter-march to  
the left } and double the Reere.

The word of reduction for either, is, *From half-files as you were.*  
Half-ranks to the right, by counter-march double your left flank.  
*Half-ranks that doubled face to the right, march forth into your places.*  
Half-ranks to the left by counter-march double your right flank.  
*Half-ranks that doubled face to the left, march forth into your places.*  
Half-ranks of the right, double your left flank.  
*Half-ranks that doubled, face to the right, march forth into your places.*  
Half-ranks of the left, double your right flank.  
*Half-ranks that doubled face to the left, march forth into your places.*  
Half-files double your front to the right intire.  
*Half-files face about to the left, march forth into your places.*  
Half-files double your front to the left intire.  
*Half-files face about to the right, march forth into your places.*  
Half-files double your front inward intire.  
*Half-files face about to the right, march forth into your places.*  
Half-files double your front by division.  
*Half-files face about to the right and left inward, march forth into your places.*  
Front half-files double your reere by division.  
*Front half-files face about to the right and left inward, march forth into your places.*  
Front half-files, double your reere to the right intire.  
*Front half-files face about to the left, march forth into your places.*  
Front half-files, double your reere to the left intire.  
*Front half-files face about to the right, march forth into your places.*  
Half-ranks of the right, double your left flank intire, advancing.  
*Half-ranks that doubled, face to the right, march forth and take your places.*  
Half-ranks of the left, double your right flank intire, advancing.  
*Half-ranks that doubled face to the left, march forth and take your places.*  
Half-ranks of the right, double your left flank by division.  
*Half-ranks that doubled, face about to the right, march forth into your places.*  
Double your ranks to the right intire.  
*Ranks that doubled, face to the left, and march into your places.*  
Double your ranks to the left intire.  
*Ranks that doubled, face to the right, and march into your places.*  
Double your ranks by division.  
*Ranks that doubled, face to the right and left inward, and march into your places.*  
Double your files to the right intire, advancing.  
*Files that doubled, face about to the left, march down into your places.*  
Double your files to the left intire, advancing.  
*Files that doubled, face about to the right, march down into your places.*  
Files double your depth intire to the right.  
*Files that doubled, as you were.*  
Files double your depth to the right, every man falling behind his bringer up.  
*Files that doubled, as you were.*  
Files double your depth to the left, every man falling behind his bringer up.  
*Files that doubled, as you were.*

ranks to either hand, doubling of files to the contrary reduces it. Or in doubling of files to any hand doubling of ranks to the contrary will reduce them. Note that upon all motions of doublings, that they who are to double, before they move from their places are to advance their pikes, and shoulder their muskets. When they have performed their doubling, they are to conform the posture of stoewoom they double, whether it be Order, Advance, or Shoulder. Note that all intire doublings are to be performed at order in both rank and file. Or it may be reduced by half files (that now are) double your ranks forward to the contrary hand.

## CHAP. XII.

Of Inversion, and Conversion, and of doubling Ranks.

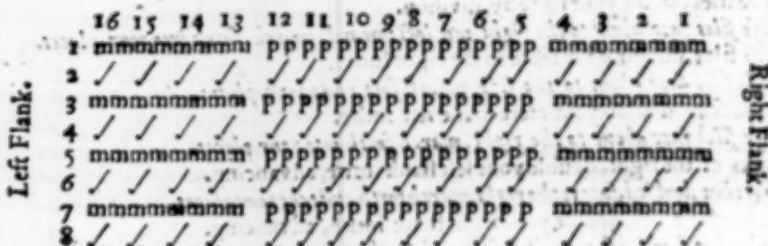
There is yet another doubling of the depth, which is called *Inversion*. But because some out of their ignorance make little or no difference betwixt *Inversion* and *Conversion*, give me leave for the clearing of the doubt, to place *Conversion* and *Inversion* together, that by their contrary effects the difference may be the more perspicuous to such as shall be desirous to know them. Yet before I either enter upon *Figure* or *Command*, for *Inversion* or *Conversion*, I hold it necessary to shew some of the *Figures* of those *Doublings*, for which I have already given the words of *Command* and *Reductions*. And then next after them, I will place both the words of *Command*, and the *Figures* belonging to *Inversion* and *Conversion*.

This *Figure* next following is a doubling of *Ranks* to the *Right*, where you may perceive how the even ranks are inserted into the odd ranks: the prick *p* denoting the places they stood in, before the doubling began, the little line or stroke drawn from the prick, shewing the manner of the doubling: I think it would be needlesse to make another figure, to shew the doubling of ranks to the left; for the meanest judgement may by this figure easily apprehend what the other would be.

Note that in the doubling of ranks, the even ranks are to double into the odd beginning always to reckon from the first rank.

The Command is, *Ranks to the Right double.*The Direction is, *Every even Rank move as three steps into the odd.*

Front.



Rear.

Ranks as you were, or Files to the left double.

## CHAP. XIII.

Doubling of Files.

In doubling of files ever observe this rule, that the even files are to be inserted into the odd files; always beginning from the hand named: as for example, in this present doubling of files, the left hand file stands fast, the second file doubleth into it, the fourth file into the third, and so for the rest. If your command be to double your files to the right; then contrariwise the right hand file stands fast, the rest of the even files doubling into the odd, accounting from the right, as before from the left. Thus much may suffice for the doubling of files: only take this by way of admonition; that as in doubling of ranks anyway, you are to observe your right hand Leader: so in doubling of files, you are to observe your file leader; so that as near as possibly may be, you may either in rank or file, be altogether in one motion. If you please further to observe with me, that this doubling is a doubling of number, and not of place, the depth of the Battell not being thereby extended, for further satisfaction observe this Figure.



The Command is, *Files to the left, double.*

The Direction is, *Every even file from the left, at three steps move into the odd.*

		Front.															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Left Flank.	1	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	2	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	3	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	4	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
Right Flank.	5	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	6	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	7	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
	8	M	/	M	/	P	/	P	/	P	/	P	/	M	/	M	/
		M		M		P		P		P		P		M		M	
		Rear.															

At three steps, every even file doubling into the odd files, always beginning to account with the outmost file to the hand named, as I have formerly said.

The Reducement, *Files as you were*; or, *Ranks to the Right double.*

# CHAP. XIV.

*Of doubling by Bringers up.*

The doubling which next followeth, shall be a doubling by *bringers-up*, of which sort, one figure will be sufficient, which I hold most necessary to demonstrate in manner of motion, the Command and Figure followeth.

The Command is, *bringers up, double your Ranks forward to the right.*

The Direction is, *The last Rank pass forward to the Right, and Rank even with the Front, the rest following successively.*

		Front.															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Left Flank.	1	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	1
	2	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	5
	3	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	8
	4	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	4
	5	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	6
	6	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	3
	7	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	7
	8	m	m	m	m	p	p	p	p	p	p	p	p	m	m	m	2
		Rear.															

In this doubling of ranks by *bringers-up*, as likewise in all other of like nature, they that are to move, are to advance their pikes. But if, the Commander please, it will be best for the ease of the musketeers to be shouldered. And upon all doubling of ranks where ever, let them be sure to observe their right hand men.

The Reducement, *Bringers up, Face about to the left, March forth into your places.*

This doubling of Ranks by *Bringers up*, differeth from the other doubling of Ranks which I first shewed; not only in regard of the distance between the Ranks, and quantity of ground: but also in the dignity of the doublers.

First, it differeth in *place*, the former leaving *larger distance* between *rank* and *rank*, being *double* that *distance* they formerly stood at: this to the contrary, continuing & preserving the *distance* they first had between each *rank*, and leaving all that ground the *half-files* formerly occupied, as you may in part perceive by the *little priks* at the bottom of the figure.

It differeth also in *dignity*, bringing the *best*, & *second* sort of *soldiers* together into the *front*: the other producing the *fifth rank* in *dignity* to be doubled into the *first*, &c. The manner of the doubling you may plainly perceive by the figure, the *motion* of this doubling & way to perform it, is as followeth. The *eighth* or *last rank*, which are the *bringers up*, pass forward *even in rank* through or between the *intervalles*, to the *right* of them that stand before them, untill they come *even in rank* with the *front*; The *seventh rank* following those which marched from behind them, placing themselves in the *second rank*, the *sixth* in the *third*, the *fifth rank*, or *half-file* in the *fourth* or *rears* of the *front half-file*. This doubling maketh a very able *front*, in bringing all the *best soldiers* together. And although it hath diminished the *number*, in regard of the *depth*, yet it hath doubled the *number*, in the *length*. This doubling, is in *quantity of number*, not of *ground*. When you reduce them into their places, remember this, that the *rank* which last took his place in the execution of this *Motion*, must first march into his place in the way of *reducement*. For as they are led on by their *bringers up*, contrariwise they are led off by their *half-file leaders*.

This doubling a great strengthning to the Front.

In the doubling of the *Front* to the *left* by *bringers up*, it is the same, only differing in the hand. Wherefore let this suffice for doubling by *bringers up*.

#### CHAR. XV.

*Doublings of files outward and inward.*

The next doubling, is a doubling of *files outward*, which works the same effect; as to double *files* to the *right* and *left*. For the *right flank* is to double to the *right*, the *left flank* to the *left*. As you may plainly perceive by the following figure.

The Command is, *Files to the right and left double outward.*

The Direction is, *The outmost files of each flank stand, the even files from each flank double into the odd.*



This doubling of *files* to the *right* and *left outward*, strengthneth both the *flanks* at once; by doubling their *number* in *depth*: But it weakneth the *inward part*, where it taketh two *files* clean away, leaving



leaving a *large interval* in the *midst*. Some say it is good when a *Commander* will grace any, to bring them through the *center* or *midst* of the *Battalia*. But you must note, if you have an *odd file* you cannot so punctually performe it, as when the *number* of your *files* be *even*. The manner of the *doubling* you may perceive by the *figure*, the *motion* by the *little lines* drawne from the *pricks*, the performance is as followeth.

The *outmost file* of each *flank* stands, the *second file* double into them; the *third file* from each *flank* stands, the *fourth file* double into the *third*, the *sixth* into the *fifth*, and so likewise for the rest.

If you would *double files* to the *right & left inward*, it is to be done the contrary way; for whereas in this *figure* of doubling last performed, the *inmost files* stand, the *other doubling outward* into them: contrariwise the two *inmost files* should stand, the rest doubling to them *inward*; and whereas in this there is a *larger distance* in the *midst*, then is in any other part, the other part *center* would be *closest* in that part. Some men do not approve of either of these *doublings*. I leave every man to his own choice. The *practice* tends to *perfection*, and he that can do much may do little when he listeth.

## CHAP. XVI.

## Of doubling by halfe Files.

THE next doubling is a *doubling by halfe files*, whereby the *length* of the *battell* is extended to double the former proportion of *number*, the *depth* being extenuated both in *number* and *place*. This *Figure* will demonstrate unto you the manner, of the *motion*, which is as followeth.

The Command is, *Half files double your Ranks forward to the right.*

The Direction is, *Half-file leaders passe forwards to the right into the front, the rest of the ranks following successively.*



*Half-files face about to the left, march forth into your places.*

This *doubling of Ranks forward* by the *half files*, is a *Motion* generally approved of by all for serviceable, if it be done with *conveniency*. It differeth from the other *doubling by bringers up* in *quality*, not in *quantity* (for therein they keep one proportion:) In *quality* it differeth thus: The *doubling by bringers up* brought the *best* and *second* sort of *souldiers* together into the *front*, the *fourth* and *third* sort into the *rear*: so that the *rear* was worse then the *front*: this doubling by *halfe files* brings the *best* and the *third* together into the *front*, and leaves the *second* and *fourth* in the *rear*: so that the *front* is made more able then the *rear* by  $\frac{1}{2}$ . It differeth likewise in *Motion*; For whereas in the other doubling by *bringers up*, the *Motion* was begun by the last rank, every Rank following the Rank which came from behind them: this contrariwise is directly led forth by the *fifth rank* from the *front* (if they be but *eight deep*) and so is executed more surely and suddenly;

*Doubling by half-file by the Greys called par-emb-le, or insert on Tact. Ali-an. 31. &c.*

*Doubling by half-file makes the front to precede the rear by one file.*

In the reduction of this doubling the bringers up are the leaders of the motion.

suddenly; the *fifth rank* passing into the *first*; the *sixth rank* into the *second*; the *seventh* into the *third*, and so for the rest. For the *reducement*, when they are commanded to *face about to the left*, and *march forth into their places*, then as the motion was led on by the *half-file leaders*, so in the *reducement* they are led off by the *Bringers up*: *Doubling of half-files* to the left produceth the same effect, only the contrary hand.

## CHAP. XVII.

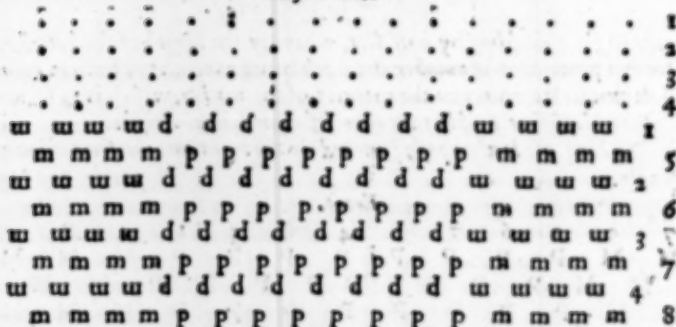
*Of doubling the Reere by Front half-files.*

**T**He doubling of the *Reere* by *Front half-files* is differing from the doubling last shewn, more in manner than matter; both concurring in substance, although differing in circumstance. To say more of it, were more than needed, only peruse the *figure*, which presents it self unto you (as it is in Motion.)

The Command is, *Front half-files, double your Reere to the right.*

The Direction is, *Front half-files, face to the Reere, and march down even to the last rank.*

*First Front.*



*Reere.*

*Front half-files, face about to the left, march forth into your places.*

The Rank which holds the fourth place of honour are the leaders of the motion.

This doubling of the *Reere*, by the *front half-files*, is to be performed after this manner (The command being first given) the *front half-files* face about to the left (the *pikes* being all advanced, the *muskets* all either *poised* or *shouldered*) and so being led by the *half-file leaders* to the *reere*, which are those that hold the 4<sup>th</sup> place of honour, they march directly forwards to the left of the other part of the body, which stood faced in opposition, untill the leaders of the doubling have ranked even in rank with the *bringers up*, the rest ranking even with the other standing ranks, according to their places: If it be for service that this doubling is used, then the whole *Body* is to face about to the *reere*, being the part to be doubled: If only for exercise, then the *Commander* may (if he please) keep his place, and the doubling being performed, face the whole *Body* to the *Leader*, and command for the *reducement*; *Files to the right*, double entire advancing; which reduceth each man to his first place.

## CHAP. XVIII.

*Of doubling the Reere by Counter-march.*

**T**Here is another manner of doubling of the *reer*, by the *front half-files*, contrary to that shewn in the precedent chapter, which is done by the way of the *Lacedemon counter-march*, which some would rank amongst the *Counter-marches*; Because (say they) the motion is a *Counter-march*. But the *Akt intended*, or thing wrought, is a doubling: and if it were to have the denomination of a *Counter-march*, then it ought not to mix with any other part of the *Body*, only

to

to counter-march the front into the midst, and there to stand, without passing forward to the Reere; (which makes it a doubling) and then it might be accounted for a part-counter-march. But as it is here commanded, and performed, it is a doubling. Observe the Command, and Figure following.

The Command is, *Front half-files, counter-march to the left, and double the Reere.*

The Direction is, *Reere half-files, face to the Reere and stand, the rest counter-march to the left, and lose ground.*

*First Front.*

1	6	7	3	2	6	7	3	4	8	5	1	4	8	5	1
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M
W	W	W	W	d	d	d	d	d	d	d	d	W	W	W	W
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M
W	W	W	W	d	d	d	d	d	d	d	d	W	W	W	W
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M

*Reere.*

*Front half-files, face about to the left, march forth into your places.*

This doubling of the Reere by counter-march, produceth the same effect to the Reere, as doubling the front by Bringers up doth unto the front: The counter-march by which it is performed, is a counter-march of less ground: we will speak more of it amongst the Countermarches. The Command to reduce it is (if the Commander stand at the head of that part that is doubled) *Front half-files, face about to the left, march forth into your places.* If he keep his first stand, having faced them to him; then *Front half-files, march forth into your places.* To double the Reere to the left by counter-march, is the same, differing only in the hand. I will next shew a doubling of the left flank by way of Counter-march.

## CHAP. XIX.

*Of doubling Flanks by way of Counter-march.*

**H**Alfe Ranks (or Flanks) are then said to be doubled, when the depth of your Battalia is increased to double their former proportion of Number or Place, (or both) which may be done divers wayes. But this Chapter, and Figure is only to demonstrate unto you the doubling of the left Flank by way of counter-march. The Figure followeth, as the doubling is in motion.

The Command is,

*Halfe rank, to the right by Counter march, double your left flank.*

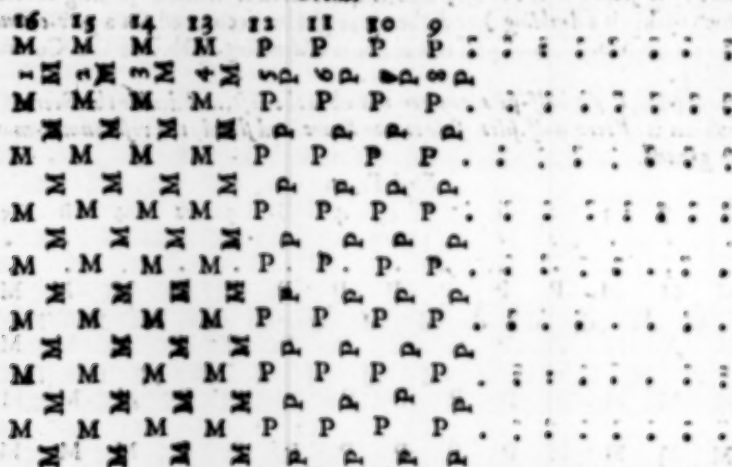
The Direction is,

*Face to the Right, and counter-march to lose ground.*

*Front.*

A part-counter-march is when one moiety or part of the body countermarches thereby not altering the number of the length, or depth of the figure; but only transferring one part into another. It is at the discretion of the Commander to face the Company which way he pleaseth, either for motion, or reduction of any motion formerly performed.

Front.



Rear.

*Half-ranks that doubled, face to the right, march forth into your places.*

This doubling of half-ranks by countermarch is a doubling of Number, not of Place; for the depth still retains the same proportion in quantity of ground, only augmented by one man, the length of your Battalia being diminished both in Number and Place; the right flank being wholly inserted into the left flank, as you may perceive by the Figure. The motion is to be performed on this manner: The half-ranks of the right, face to the right, and then even in rank together, countermarch between the Intervales, untill the outmost file to the right, which is marked with the figure 1, be come into the outmost file of the left flank which is marked with the number 16; the second into the fifteenth; the third into the fourteenth; the fourth into the thirteenth, and the rest in like manner. The use of this doubling is, to strengthen one of the flanks by bringing more hands to doe present execution, the other flank being in more safety. The way for the Reducement of this motion is after this manner: The half-ranks that doubled being faced to the right, then they which were the last in taking their places in the motion, now are the first which take their places in the reducement, orderly marching in rank together, untill they come to their places; then facing to their Leader they become files againe. The left flank may in like manner double the right by countermarch, the difference is this: the right flank stands, the left flank is inserted into the right as before the right was into the left. To shew another figure for it, would be altogether needlesse.

The use of  
this doubling.

Observe the  
manner of  
the reducement.

## CHAP. XX.

*Doubling half-files to the right entire to accommodate the doubling of half-ranks.*

I Should now come to shew another manner of doubling of flanks, by inserting the one flank into the other, a different way from that last shewn. But if I should perform it, as the body stands in the ordinary square, flanked with Muskettiers, then it would produce a mixture of Armes. To avoid which, before you enter upon this doubling of passing in, through or between your halfranks, cause your half files to double the Front to the right entire, which being performed, you may then proceed to the doubling of your flanks any way without mixture of Armes. If I should have shewn this motion with Pikes or Muskettiers alone, this first doubling of half-files entire might have been spared: but I desire not to leave any thing obscure or difficult, but to render it as easie and apparent

parant as I may, to the capacitie of the meanest Reader : and if any place in this small Treatise of mine shall seeme ambiguous, I shall intreat the courteous to impute it to my lacke of language to expresse my selfe, rather than any will in me to conceale, or obnubilate the sense, whereby to deprive them of the true meaning of any thing in this booke contained. But lest by *doubling of words*, I prove tardy in my worke; I will forbear further circumstance, and come to the prosecution of the matter : which in the first place, will be a *doubling of half-files to the right intire*, whereby the next doubling may be the more comodiously accomplished. The figure followeth.

The command is, *Halfe-files double your front to the right intire.*

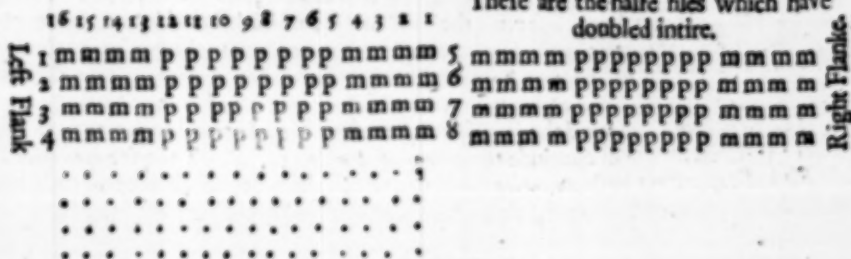
The Division is, *Halfe-files face to the right and march.*

*Face to your Leader.*

*March up, and even your front.*

Front.

These are the halfe files which have doubled intire.



Reere.

This *doubling of halfe-files to the right intire*, I have fully exprest in the figure as the bodie stands, the motion being ended : because wee are to adde another *doubling*, before wee reduce them. This figure next following, will be best shewen in the motion (or action) not fully performed : that thereby the manner may be the more easily discerned. But by the way observe, that this *doubling of halfe-files*, is a *doubling both of number and place*; for the length of the *Battalia* is not only double so many a breast as they were before, but they also have extended their length to double their proportion of ground, which formerly they did occupy. I forbear to speak more of this doubling, until we come to shew it in motion: and now proceed to the next *doubling* upon this.

*All intire doublings are doublings both of number and place.*

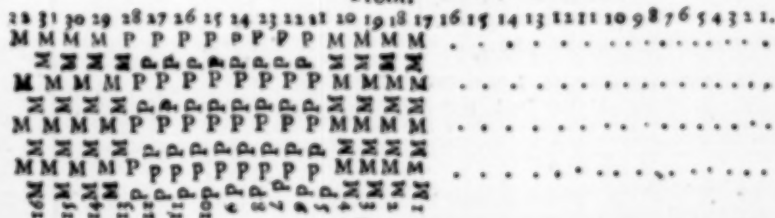
The Command is,

*Halfe ranks of the right, double your left flank.*

The Direction is,

*Half ranks of the right, face to the left and march, face to your Leader.*

Front.



Reere

*Half ranks that doubled face to the right march forth into your places.*

E

This



\* Mixture  
of Arms  
at some  
time may  
be necessa-  
ry.

\* The re-  
ducement  
to both these  
doublings,  
and first to  
reduce the  
doubling  
of the left  
flank.

\* The dou-  
bling of half  
files to the  
right intire  
reduced.

\* Order both  
in rank and  
file, the true  
flank re-  
quired for  
intire dou-  
blings.

This doubling of half ranks is a more speedy and sure doubling, than the doubling of half ranks by count-r-march: notwithstanding it is most commonly used when the body consists but of one sort of Arms, being either all Muskettiers, or all Pikes. Nevertheless because in my figures I have as well Muskettiers as Pikes, I have made use of a doubling by half-files intire, and from that have doubled my left flank, so to prevent the mixture of Arms: \* However mixture of Arms upon some occasion may be necessary. The manner to perform the motion, is this. The left flank stands, the half-ranks of the right, face to the left; and then the inmost file of the right flank, (all the files of the right flank, being by this facing become ranks) is the leader of this motion, marcheth forth directly to their left hand, between the intervals of the ranks of the left flank, untill that the sixteenth file which now is become a rank, hath placed it self orderly in the two and thirtieth file, (which is the outmost file of the left flank.) The fifteenth in the one and thirtieth; the fourteenth in the thirtieth: the thirteenth in the nine and twentieth; and so likewise of all the rest. The places may be perceived by the figure. The doubling is of number, and not of place. \* For reduction to both these doublings, first cause the half-ranks, which last doubled, to face to the right; and so to march into their places. They that last took their places in the motion, are the first that take their places in the reduction. \* The doubling of half-ranks being thus reduced; Next for the reducing of the half-files, (which were doubled before, for the accommodating of the doubling of half-ranks) Command the half-files to face about to the left, and to march forth into their places: Wherewith I will conclude these sorts of doublings, which require open order in rank and file, and come next to shew intire doublings, which claim a closer distance for their true performance. And therefore conceive them closed to their \* order both in rank and file,

## CHAP. XXI.

The difference between intire and divisional doublings, and of doubling half-files intire.

What in-  
tire dou-  
blings re-  
quire is  
meant by  
partic-  
ular and di-  
visional dou-  
blings.

HAVING closed our souldiers to their due distance, I will next proceed, to shew doublings intire. But me thinks, I hear some already inquiring, what is meant by intire doublings; and therefore without offence to the curious, give me leave to be so curious to tell them, That all doublings, are either intire or divisional. Intire doublings being these, or such like, as when the files, or half-files, ranks, or half-ranks, (according as the command I shall be given) doe march forth jointly together, without division or dissipation; to double the part commanded. Partic- and divisional doublings being such, as I have formerly shewen; as when the files or half-files, ranks or half-ranks, are dis-ranked and divid d into more parts or places than one. This may serve for way of distinction: I will now shew intire doublings, as they are in action: and first begin with doubling half-files. The figure followeth.

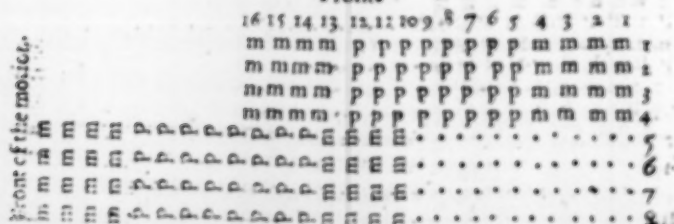
The Command is, Half-file: doub'e your front to the left intire.

The Direction is, Half-files face to the left, and march.

Face to your Leader.

March up and even your front, Face about to the right.

Front.



Reere.

Half-files face to the left, and march.

This *doubling of halfe files intire*, hath beene held a better *doubling*; then either the ordinarie doubling of *ranks*, or the usuall way of doubling by *halfe-files* or *bringers* up: some of the causes are these. First it makes no disturbance to the other part of the *Battalia*; but that it may either be executed in the time of *motion*, *exercise*, or *skirmish*. Secondly, it appears another *solid bodie*, to the great *discouraging* of any enemy. Thirdly, it is very apt for *over-fronting*; being a doubling both of *number* and *place*. That it hath bin used by *antiquitie*, take one example out of *Polybius*. *Philopemen* the *Achaian* Generall having ranged his *Battalia* in form of *Plagiophalanx*, the *Lacedaemonian* *Maechanidas* being to confront him, marcht up directly opposite to his right wing in form of a *Horse* (by them called *Orthophalanx*) but being come within convenient distance, he suddenly causeth the *Reere* half-files to double the front to the right intire, thereby equalizing the left wing of the *Achaians*. The manner or way to performe the motion is this. The *halfe-files* face to the left, and march till they are quite clear of that part of the body, which stands; then they face to the *Leader*, and so march up, untill they are become even in rank with those which stand upon the right flank: and then the figure will be perfect. For the reducement; the word of Command is, *Halfe files face about to the right, march forth into your places*: having faced about, they march straight forth, untill they be clear of the front half-files; then they face to the left, and march straight forth, untill every man hath his right place, and then face right after their Leaders. The doubling of half-files to the right intire, is performed after the same manner, only differing in the hand.

## CHAP. XXII.

Of doubling the Front inward intire.

**D**oubling of the *Front inward intire*, hath beene a doubling as usefull, as ancient: notwithstanding, most commonly used by great bodies, as when one *Regiment*, *Division*, or *Ma-*  
niple, moveth forward, between two others, thereby *seconding* or *reviving* them: whereby the *Fronts* of all the three divisions became ranged in an even line; but I have onely taken upon me, to shew the motion, in a private Company. The figure whereof followeth, as it is in the execution.

The Command is, *Halfe files double your Front inward intire.*The Direction is, *Front half-files face to the right and left, and march, stand, and face to your Leader.**Reere half-files, march up and even your Front.*

Front.

16 15 14 13 12 11 10 9  
MMMMMMMMMMMM  
MMMMMMMMMMMM  
MMMMMMMMMMMM  
MMMMMMMMMMMM

8 7 6 5 4 3 2 1  
pppppppppp  
pppppppppp  
pppppppppp  
pppppppppp

The halfe files

MMMMMMMMMMMMMMMM  
MMMMMMMMMMMMMMMM  
MMMMMMMMMMMMMMMM  
MMMMMMMMMMMMMMMM

Reere.

*Halfe files, face about and march, Front half-files close your division. Face all to your Leader.*

It hath been the custome amongst ancient souldiers and great Commanders, that in the matter of *Exercise* they shew some things which are most apt for a private Company, some for a *Regiment*, other some most usefull for compleat armies: so in like manner, it must be the discretion of every Reader, (whether he read for apprehension or representation) to suit and fit each mention to his true end and purpose, and with the wife man, rather read twice, then judge once: and then perhaps, when the intent of the Author is perceived, his opinions may be received, yet what need I, or any other apologize ought in the behalfe of this *Form*, or any other such like; sith they are

The manner  
how this  
doubling  
ought to be  
performed.  
The Re-  
ducement.

but the expressions of the *various figures* which proceed of the words of Command, used (almost) by every ordinary *Exerciser of a Foot Company*? Nevertheless, if *Esops* long ear'd beast passing by should peepe into this *Druggists shop*, and quarrell with the Compounds, I shall not study for a further answer, than *That the excellent and skilfull Physitian can convert that into an Antidote, which the unlearned foole Will make his poison*. But least I bee tax'd for digression, the motion of this doubling is thus performed. *The half-files of the front* faceth to the right and left, and march till they have left a distance betweene them sufficient to receive the *half-files* of the *Reere*, then stand and face to their *Leader*. That done the *half-files* march up, and even their *front*. For the reducement of this figure, there are (as for all the rest) divers wayes. But because that it is necessary to shew one, let the *half-files* face about to the *reer*, and march untill they are clear of the *front half-files*, then caule them to stand and face to their *Leader*; that being performed, command the *front half-files* to close their *divisions*, and they are rightly reduced as at first.

## CHAP. XXIII.

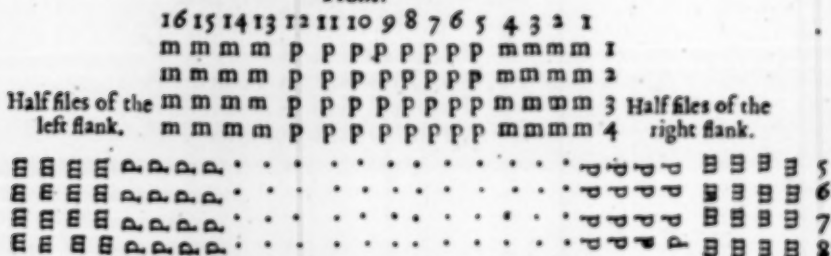
*Of Half-files doubling the front by division.*

THIS doubling hath been very well approved of by Count *Mausfield*, Sir *Thomas Kelly*, Captain *Bingham*, and divers other moderne souldiers of good esteeme, who prefer these sorts of *doublings* before any other; because these *doublings* may be used in time of fight, without disturbance to the other part of the battell. The figure stands as it is in motion.

The Command is, *Half files double your front by divisions*.

The Direction is, *Half-files face to the right and left, and March, Stand: Face to your Leader, march up, and even your Front*.

Front.



Reere.

*Half-files about inward. March forth into your places.*

The manner  
how this  
doubling  
ought to be  
performed.  
The redu-  
cements

The way to performe this motion, is as followeth: the *half-files* are to face to the *right*, and to march, untill they are cleare of the *Reere*: part of the *front division*; then they face to their *Leader*, and march up, untill they be come even in rank with the *front*, and so stand: which perfects this *doubling*. The way to reduce them is as followeth. The *half-files* are to face about to the *Reere*, and to march forth-right, untill they are cleare of the *front half-files*; and then they are to face to the *right* and *left* inward; and so to march and close their *division*: then being faced to their *Leader*, they are reduced as at first.

## CHAP. XXIV.

*Of doubling the Reere by division.*

THIS next doubling shall be a *doubling of the Reere* by the *front half-files*, which will work the same effect to the *Reere*, as the last *doubling* by division did to the *front*. It may be usefull in the passing of a River, when the enemy chargeth or pursueth in the *Reere*. The *front division* is her opening, as you may perceive by the figure (next following) and suffering the *Reere half-files* to passe through them, they maintaining the *skermish*, untill the other have attained the

he further bankes of the river; or else the *Front half-files* being opened to the *right* and *left*, and *joined* upon the *Enemy*; March gallantly up, and receive the *Charge*, whilst the others provide for themselves. This motion may also be usefull, when you have gained some place of advantage, For then by this *doubling of the Rere*, your battaile will be both *lengthened* and *strengthened*, And so by the sudden bringing of these *Supplies* into the *Rere*, you may not onely relieve your owne, but happily *overfrant your enemy*. The figure followeth.

The Command is, *Front ha'f-fires, double your Recye by division.*

The Direction is, *From hal'e-fie's, Face to the right and l ft. and march. When th y are clear of th. standing part of th: Body, fac: to th: re:re and move downe even With th:re:re.*

This was th. Front before the motion begun.

[illegible]

m m m m p p p p p p p m m m m 5  
m m m m p p p p p p p m m m m 6  
m m m m p p p p p p p m m m m 7  
m m m m p p p p p p p m m m m 8

Recre

*Front half-files face about to the right and left, inward march forth into your places.*

The motion may be thus performed: The *Front half files* face to the *right* and *left*, and *march* untill they are cleare of the other *half-files* of the *Reere*; Then they face to the *Reere*, and march on untill they have attained to be *even* in *ranke* with them, whom they had command to *double*; which perfects the *doubling*. The way to *reduce* them, is as followeth: If you keep your place of the first *Front*. Then let your *Front half-files* face *about*; (according to the former directions) and *March* untill they are cleare of the *Reere half files*, which stand; Then face to the *Right* and *Left inward*, and close their *Divisions*; So being faced all to their leader they are reduced. *Sundry* and *divers* wayes there are for *Reduement*, both of this and most other *figures*. Nevertheless I conceive, if I give one *reduement* to each *figure*, it may suffice to those that know little; As for such which know better, they know more wayes to the wood then one: And surely, should I enlarge my self, but halfe so much as I might (and indeed in some things, no more then were needfull) I should then bring my *Volume* into too great a *bulke*; and by the *price* hinder some of the profit: But I am willingly silent in many things, to the end, that others may thereby be the better encouraged by my weaknesses, to take notice of their owne *Worths*, which may induce them to put pen to paper, and thereby produce some *Worthy Worke*, which may tend to their credits, and their Countreys good.

The Motion ad-  
vantageous  
for the  
Strength ne-  
ing of the,  
Nerve.

Instructions  
how to per-  
form this  
dubbing.  
The R-  
ducement.

The car owner  
may find  
many ways  
of Reducement.

## СНАР. XXV.

*Of doubling the Reere intire, by the Front ha'f-files.*

His next *doubling* shall be a *doubling* of the *reere* to the *right intire*, by the *front half file*: which I intend not fully to demonstrate, but to deliver the *figure*, as it will offer it selfe in the *Motion*. And I conceive it will not bee amisse (for the benefit of the *Learner*) to render some *formes* in their moving *postura*, rather then to shew them all as they would appeare, the motion being perfected for the way of the *working*, gives a great deale more light to the *Learner*, then to shew the thing absolutely wrought. Neither would I have any thinke, although I shew these varieties of *doublings*, and acknowledge them to be of singular good use for the extention of the *length* or *depth* of any *Battaile*; but that the wise conduct and skill of the *Commander* must so order them, that the *extending* of the







The Command is, *Double your Left flank intire, advancing.*  
The Direction is, *Right flank, March, Stand, face to the left,*  
*and march even with the left flank;*  
*Face: all to your Leader.*

Front of the right flank.

P P P P m m m m  
P P P P m m m m  
P P P P m m m m  
P P P P m m m m  
P P P P m m m m  
P P P P m m m m  
P P P P m m m m

Right Flank

Front.

m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p  
m m m m p p p p

Left Flank

Reere

Right flank that doubled, face about to the left, march  
forth into your places.

For Instruction how the motion of this doubling ought to be performed (according to the words of Command and Direction formerly given) is as followeth. The *left flanks* (or Half-ranks of the left) *stands fast*: the *right flanks* both *Muskettiers* and *Pikes* march forth-right untill the *Reere* of the *right flank* be *advanced* before the *Front* of the *left flanks*, as is foresaid. Then *face* them to the left; and *cause* them to *march* untill the *Pikes* are *even* in rank with the *Muskettiers*, then *face* to their *Leader* and the doubling is perfect.

For the *Reduement*, let the *right flanks* that doubled *face* to the right, and *march* untill they are clear of the *left flanks* (or standing part of the *Battalia*) Then *cause* them to *face* againe to the right, and *march* straight downe into their places. Lastly, being *faced* to the *first front*, they are rightly *reduced*. The *right flank* may also *face* about and double the *left flank* towards the *Reere*, both (or manner of figure) work one and the same effect, differing only in circumsistance, the one being a doubling *advancing* forwards before the *front*; the other a doubling of the *depth* towards the *Reere*. The *left flank* may double the *right flank* intire, either to the *Front* or *Reere*; but by this that hath already been shewen, the others may be understood; wherefore I spare the Figures.

# CHAP. XXVII.

## Of doubling flanks by Division.

This next doubling is a doubling of flanks by division. And without question, a serviceable doubling and very useful for some occasions. For if you note the figure, and conceive rightly what it will produce (the *Motion* being ended) it makes a strong forme of *Battaille*, to give fire three severall wayes at once. The figure followeth.

E 4

TH

This Reduement receives the word Body faced to the left flanks. If they face to the proper front; then right flanks that doubled, face to the Right, march forth into your places, or half-ranks that you are, double your front to the left intire, either of these will do it.

Reduement

**The Command is,**

*Left flank, double your Right flank by Division.*

The Direction is,

The Direction is,  
Half-files of the left flank face to the Rear: Front and Rear, half-ranks move clear of the Body, and stand. Front half-files face to the right, and rear half-files to the left; and move even with the right flank.



*Half-ranks that doubled, face about inward, March forth into your places.*

Note the instruction.

Red-cement

The *motion* of this *doubling*, is thus to be performed. The *reere halfe-files* of the *left flanke*, face about to the *right*: and then both the *front halfe-files* and *reere halfe files* march-right; untill they are cleere of that part of the *body*, that *stands*: then each *division* faceth that way, which they are to *double*, (which the *Front halfe files* must doe to the right, the *Reere halfe-files*, to the *left*.) And so march forth-right, untill the doubling be performed. For the *Reducement*; you are to conceive, it may be diversly performed: If the *Leader*, be at the *right flanke*, (which is the part that was *doubled*:) Then, the *Reducement* is, as followeth: The *halfe-ranks* that *doubled*, *f. ce about*, *inward*; and *m. reb* forth-right untill they are cleere of the *right flanke*, which *stands*; then, the *Front halfe-files*, face to the *left*: the *Reere halfe-files* to the *right*; and then *close their division*. The *Le. d. r* going to his *first Front*; and facing the *whole Body* to him, they are *reduced* as at first: If that the *right flanke* would *double the left flanke* by *division*; the matter is the same: differing onely in the *band*.

CHAP. XXVIII.  
*Of doubling Ranks in, &c.*

Now the  
 & he once  
 e, I grieve  
 in this dou-  
 bling.  
 Differing  
 from dou-  
 bling by  
 h: f. fies in  
 d. 2. one.

**D**oubling of ranks to the right intire, is a doubling, both of Number, and Place: and in some sort, worketh the same effect; as the doubling of half-files to the right intire. But differeth first in regard of the parties, which are the doublers; and secondly, in the distance, left after the doubling. For the first, which is matter of dignitie. The first and sixth in honour, are ranked together in the front, the second and sixth: in dignitie, make the last ranks in the Reere: So that the front precedes the Reere: in worth: whereas in the doubling by half-files, the Front exceeded the Reere, by 2. Secondly, it differeth for the distance; by leaving open order, at the least, betwene all the ranks. For further satisfaction, observe this Figure following.

The




		Front.									
Left Flank.		16	14	12	10	8	6	4	2	Right Flank.	
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
		M	M	P	P	P	P	M	M		
16M		14M	12P	10P	8P	6P	4M	2M	1		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	2		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	3		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	4		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	5		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	6		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	7		
.M.		.M.	.P.	.P.	.P.	.P.	.M.	.M.	8		
		Rear.									

*Files that doubled face about to the left. March forth into your places.*

The motion of this doubling ought to be performed after this manner. The odd files are to stand, beginning your account from the innermost file to the hand named. The Muskettiers and Pike of the even files, are to advance their Armes, and follow their file-leaders, every file-leader leading his file forth right, before his next file to the right, untill the bringers up of the even files, are orderly placed, before the Leaders of the odd files: as you may perceive by the Figure, for Reducement: let the Files that doubled face about to the left: the bringers up of each file leading them forth, right downe the Intervals, which are on the left hand, untill they are come even with the Rear: and then stand, and face to their Leader, and they are reduced, as at first. The doubling of Files to the left intire, advancing, is after the same manner: it onely differeth in the hand: therefore I spare the figure. They that love to be curious, may likewise double files, by division, advancing.

### CHAP. XXX.

#### Of Files doubling their depth.

 His next doubling, is a doubling to the depth of the right intire: and is likewise a doubling of Files, as the other last, shewn in the precedent Chapter. Being alike both for number and place: notwithstanding it differeth from the other both in manner of executing, and in some sort of the matter executed. For whereas the other doubling, by advancing of files, did transferre all the even files into the ground before the Front: Contrariwise, this doubling doth transferre them into the ground next behinde the Rear. And as in the other doubling, you may perceive halfe the file-leaders, to remaine in the front: the other halfe to be halfe file-leaders: This doubling hath halfe the file-leaders in the front, the other halfe being the last Rank of the Rear: those which were the former Bringers up being become the two innermost or middlemost Ranks. The Figure followeth, being demonstrated as the Body post ranks: the Motion being ended.

\* By this doubling the bringers up become the two middlemost ranks.

The





## CHAP. XXXI.

*Of Conversion and Inversion, with their word of Command, and Reducement.*



According to my promise, I will now shew the difference between *Inversion* and *Conversion*: whose very names are so intricate and troublesome (to many) that they are more puzzled with the words, then the work. Some are of opinion, that they are both one; differing in *later*, not in *matter*. Others would have a difference, if they could tell how, or where. But generally, they are so chopt and changed one for the other, that the *Souldier* cannot in truth tell which is either. But that you may not be deceived, take this for a rule; that *Inversion* doth alwayes produce *file* or *files*, and *Conversion*, *rank* or *ranks*. *Inversion* consists of *files* filing, or of *ranks* filing. *Conversion*, of *ranks* ranking to the right or left. Or by increase of *files*, ranking by even or uneven parts: and of *ranks* wheeling to the right or left. I shall speake further of them in their severall places. But by the way you are to observe, that *Inversion* and *Conversion* requiue larger distance of ground, then any other motions, which must be the *Officers* care to open the *ranks* or *files* to such distances as shall be necessary to containe the *ranks* or *files* so to be *Inverted* or *Converted*, whether it be double distance, or twice double distance, or any other lesser or larger quantity of ground. The words of *Command*, with their severall *reducements*, are as followeth.

*Inversion.*

*Inversion.*

Files, file to the	$\left\{ \begin{array}{l} \text{Right,} \\ \text{Left,} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{File-leaders, leads} \\ \text{up your files as} \\ \text{you were.} \end{array} \right\}$	Ranks, file to the	$\left\{ \begin{array}{l} \text{Right,} \\ \text{Left,} \\ \text{Right, \& left.} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Files, rank} \\ \text{as you were.} \end{array} \right\}$
Files, file to the right and left by division.					

*Conversion.*

*Conversion.*

Ranks, rank	$\left\{ \begin{array}{l} 3. 5. 7. \text{ or } 9. \text{ to the right} \\ 4. 6. 8. \text{ or } 10. \text{ to the left} \\ \text{By increase } 2. 4. 6. 8. \&c. \text{ to the right} \\ \text{By increase } 1. 3. 5. 7. \&c. \text{ to the left} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Intire to the right into the front} \\ \text{Intire to the left into the front} \\ \text{By division into the front} \end{array} \right\}$	Ranks, rank as you were.		
Ranks, wheel	$\left\{ \begin{array}{l} \text{Right} \\ \text{Left} \\ \text{Right \& left} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{For reducement} \\ \text{face about to the} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Right} \\ \text{Left} \\ \text{Right \& left} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{And wheel into your places,} \\ \text{Then face to your leader.} \end{array} \right\}$	
Files rank	$\left\{ \begin{array}{l} 3. 5. 7. \text{ or } 9. \text{ to the right} \\ 4. 6. 8. \text{ or } 10. \text{ to the left} \\ \text{By increase (to the right) } 1. 3. 5. 7. \&c. \\ \text{By increase (to the left) } 2. 4. 6. 8. \&c. \end{array} \right\}$	$\left\{ \begin{array}{l} \text{To the right} \\ \text{To the left} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{into the front.} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{Ranks, file as} \\ \text{you were.} \end{array} \right\}$	

To avoid the words of *Inversion* and *Conversion*, I have delivered the directions without naming either of them. Onely I have exprest the sixe first words of *Command* to be *Inversion*; and the last sixteene to be *Conversion*. For I conceive it altogether unnecessary to adde to every word of *Command*, *Inversion*, or *Conversion*. For by so doing, the unlearned and ignorant *Souldier* will be so confused with the strangeness of the word, that he will scarce by any means be made capable of the matter. For my owne part, I have ever held this opinion; that the easiest expressions are ever to be preferred, in the way of instruction, to young *Souldiers*. I might have much enlarged my selfe, in the words of direction, concerning this subject, and have written

written concerning *Ranks* and *Files*; *Ranking by deverses*: but these already exprest, may suffice, to demonstrate to any the grounds of all: and if any will be curious, by the practice of these the rest will be found. I also at first intended to have drawne a *Figure*, the more lively to have exprest thereby each severall word of *Command*, but upon better consideration, I perceived that some of them would require much roome, and not be so apt to print, without their *Figures* were cut; and were facile enough to the meanest capacity, by their words of *Command* and *Direction*. Therefore I conceive the paines and cost may be spared, delivering the *Figures* of some few of them, that are most necessary; and for the rest, expresse by word what they will produce in *Figure*.

## CHAP. XXXII.

*Of Files, filing in sequence.*

The *Command* is, *Files, file to the right.*

**T**O performe this word of *Command*. The *right hand file* marcheth away single; the *second file* from the *right* falleth into the *reere* of the *first*; the *third*, behind the *second*; the *fourth*, behind the *third*. And so consequently, all the rest of the *files* fall into the *reere* of their next *right hand files*, untill all the whole *Company* become one *File*. It may be usefull to passe some narrow *Bridge*, or *thicket*, or *elsewhere*, where but one at once can passe; the *Commander* being willing to preserve his *files* intire and whole. The way for the *reducement* may be after this manner. The place being convenient, every *file-leader* is to leade up his *file* to the left of him that marcheth before him, untill all the *file-leaders* are even in *rank* together: their *files* orderly following them. The word for the *reducement*, is, *File-leaders, Leade up your files as you were*. For *files*, to *file on in sequence*, to the *left*, may be performed, after the same manner: it onely differeth in the *band*. But workes the same effect; onely, the *right-hand-file-leader*, led the *other*; and the *left-hand-file*, fall last of all into the *Rere*. This contrariwise, is led forth by the *left-hand-file*, and the *right-hand-file*, is the last, that taketh place in the *Rere* of the extended *file*.

*Files, file to the Right and left by Division.*

*Files* filing by *Division*, is wrought after the same manner: but differeth in this; That the *right-hand-file* of the *Company*, and the *left-hand-file* of the same, begin to leade forth at one and the same time, in their severall places. The *files* of the *right flanke* falling filewise, behind the *right-hand-file*; the *files* of the *left flanke*, falling in like manner, behind the *left-hand-file*. So that if the body be flankt with *Muskettiers*; then this filing by *Division*, bringeth all the *Muskettiers* into the *Front division*; and the *Pikes* in the *Rere* of them. If there be an *odde File*, it most commonly falleth to the *right*. The word for *reducement* is, *File-leaders, leade up your files as you were*. This sort of *Inversion*, is called *Filing in sequence*. I will now shew another sort of *Inversion*, which is by *Rank* filing. The which I will demonstrate unto you, by two *Figures*, which will be sufficient to instruct the desirous.

## CHAP. XXXIII.

*Of inverting Ranks; or Ranks filing.*

**T**HIS following figure of *Inversion*, is of *Ranks*, filing to the *right*; where all the *Ranks* are to be inverted to the out-most *file* to the *right*. For the doing whereof let all your *Files* be closed to their *Order*, or *close Order*; as shall be thought most necessary; the *rank* opened; either forward, or backward, to double distance, or twice double distance, (more or lesse) as the *Commander* shall see most convenient, according to his number. Having closed your *Files*, and opened your *Ranks*, unto their due distance; then let every *Rank* move after his *right-hand-man*, un-

This kind of  
Inversion best  
performed,  
Marching.

till every *ranke* stand right in *File*, after the *right-hand leader* of his *ranke*. In this *Figure* I have onely opened the *four* first *ranke* to their distance, and inverted but two of the *four*. By which it may easily be perceived, both the *manner* of the *work*, and the *matter* which is to be wrought. But if the *Commander* will performe it upon a *March*; then they shall not need to open to any distance, but to take their distance, in the execution: which is the easiest way, and will be thus performed. The *right hand man* of the first *Ranke*, marcheth forth right; all his *Ranke* facing to the right, and marching *file-wis*e after him. The *right-hand-man* of the Second *Ranke* falling immediately after the *left hand man* of the First *ranke*, all his *ranke* in like manner following of him. The *right hand man* of the the Third *ranke*, after the *left hand man* of the Second; his *ranke* likewise following of him. And so for all the rest, untill they are all become one *file*.



The reduction.

This *Ranke* *fil*ing, is sooner performed, and reduced, then *file* *fil*ing: and in the reduction will presently be ready to make resistance, against any opposition in the front. Whereas if *file* *fil*e, it will be a great while before the *file-leaders* will be able to make good the *Front*: the manner of the Reduction of this *Figure*, is as followeth. If they were eight men before in *Ranke*, then the first eight men, *ranke* to the left, into the *Front*. The next eight men *ranke* next after them, which makes the second *Ranke*. The third eight men, *ranke* to the left, make the third *ranke*. And so forward for the rest, untill they are reduced, as at the first. But it may be, that some will object; that in this *Figure* there is mixture of *Armes*; which if they will avoid, they may either *March* forwards their *Muskettires* of each division, and close them before the *Pikes*; and invert them first. Or they may *March* forwards their *Pikes* first, and leave their *Muskettires* to come in the *Rear*. Or if they please, they may upon a *deep* *March*, first invert the front-division of *Muskettires*, then their *Pikes*, and last the *rear*-division of *Muskettires*; which way soever it be done. The word for Reduction will be, *File*, *Ranke* as you were.

By this deep  
March it is to  
be understood  
a right in-  
version ac-  
cording to  
the  
Rank, File  
to the left.

*Ranke*, *file* to the Left, is performed after the same manner. It differeth from this last done, but onely in the band. And whereas the *Right-hand-file-Leader*, was the *Leader* of the last, this would be led by the *left-hand-file-Leader*: The *left-hand-Leader* of each *ranke*; leading forth his *Ranke* *file-wis*e as before it was performed, but to the contrary band; I spare the *Figure*.

MM P P P P MM 4

MM p p p p MM 5  
MM p p p p MM 6  
MM p p p p MM 7  
MM p p p p MM 8

Rear.

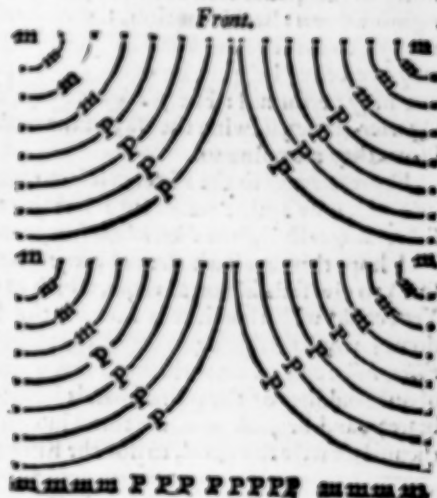
Files, *ranke* as yet were.

CHAP. XXXIV.

Of Rankes Filing by Divison: and how usefull.

THIS next Figure of Inversion is of Rankes filing by division, and is a doubling of the depth, by unequall proportion. For whereas in most of all other doublings, the Number of the Length, or Depth is augmented, but to double their former proportion of Number: this doubling of Inversion, makes their Depth so many times more in number, as there are Files to double. Or halfe so many times, if it be done by Division, as in the next following Figure. It hath beene of ancient use, amongst the Grecians, and in these our latter times, it hath beene held of speciall use, to avoyd the shot of the great Ordinance, when of necessity we are to March against any Battery. It hath also beene held good, to prevent the eminent danger of some great shewre of small shot, likely to be powdered out upon the Front of your Battalia. It may also serve for a Guard Honourable passages, large intervale, street, or gallery, (as some call it) for any great Personage, or Commander to passe through. It is also of common use, for lodging of the Colours, or Ensigne. And many other such like.

Rankes file to the right and left by Division.



To Dick: M.  
lian. Chap.  
30. pag. 8.  
line the left.

M M M M P P P P P P P P M M M M

M M M M P P P P P P P P M M M M  
M M M M P P P P P P P P M M M M  
M M M M P P P P P P P P M M M M  
M M M M P P P P P P P P M M M M

Rear.

Files, rank as you were.



For instruction how to performe this motion, It is the same with the last figure; differing onely in this; that as in the other figure, all the whole *rank* turned to the right, behind their right-hand-men: In this motion, the left-flanke, (or *half-ranke*, to the left) fall into the outmost file to the left: the *half-ranke* to the right, behind their severall right-hand-men: as you may perceive in part by the figure. I have shewen the Figure, in the manner of the action, not fully performed: The *pricke rank-wise*, denoting the places, from whence they came. The Quarter-circles, shewing the way of the motion: the *pricke file-wise*, directing, or shewing their Places they are going to.

Reduction  
by Conversion

For reduction to the Figure: it is no more then this. The Ranks which before inverted into files, now againe convert into Ranks, as they were. The word of Command for it, is, *Files, ranke to the right and left inward, as you were.*

Military  
Discipline  
is much  
simplified by  
middle sort  
of Citizens.

I hope this that hath already beene shewen, will be sufficient, (at least in some small measure) to give satisfaction to those, which as yet have not knowne what is meant by *Inversion*: Yet I could wish, that such as exercise the Companies of the Trained-bands of this Kingdom, would rather make use of the plainer word of *demonstration*, which is *Ranke, File, or File, File*: and leave out the word *Inversion*, as a word not suitable with the capacity of divers of our Souldiers of the trained Bands. Especially of this City, where Porters, Colliers, Water-bearers, and Broome-men, are thrust into the rooms of men, of better quality, as though they themselves were too good, to doe the King and their Countrey service.

#### CHAP. XXXV.

*Of the severall parts of Conversion: and how they are to be understood.*

The next branch of *Discipline* which I offer to your view, shall be of *Conversion*: and of its severall parts: wherein if there be any that thinke me tedious; let them turne it over, and settle on some other part, which may be to them more delectable: whilst I, in the meane time, shall endeavour to give content to all, neither stuffing out my Booke with needlesse discourses; nor yet too much abbreviating the matter, whereby to render it too obscure unto the commonest capacity. Wherefore take their parts as they hereafter follow.

Conversion consists of  
these parts, viz. Of

Ranks ranking

Files ranking

- |                            |   |
|----------------------------|---|
| In equall parts            | 1 |
| In unequal parts           | 2 |
| In into the Front          | 3 |
| By division into the Front | 4 |
| By wheeling to the Flanks  | 5 |
| By equall parts            | 6 |
| By unequal parts           | 7 |
| In into the Front.         | 8 |

Ranking in  
equal parts.  
This manner  
used both by  
Greekes and  
Romans, and  
is the best for  
a straight.  
Ranking in  
unequal  
parts.  
Ranks rank-  
ing in into  
the Front.

First of *rank ranking*, in even or equall parts. Which is to be understood, when there are twelve, or twenty, (more or lesse) marching abreast, and the Commander (either for the narrowness of a passage, or for some other intent) causeth his ranks to ranke three or sixe abreast, or five, ten, or any other number, either according to the place, or occasion; every ranke holding equality of number.

Secondly, *rank* then rank by unequal parts: when they rank by increase, or decrease. As when the first ranke shall be three, the next five, then seven, nine, &c. which is commonly used, for the making of *Diamond*, and *Triangular* figures.

Thirdly, *rank* then rank in into the front: when the first ranke stands: the second ranke placeth it selfe on the right or left of the first: the third by the second, the fourth by the third, and so forward for all the rest, untill all the ranks, (either to the right or left) according to direction are become one Ranke in the front.

Fourthly, *rank* then rank by division into the front, when the second Ranke, and all the rest of the



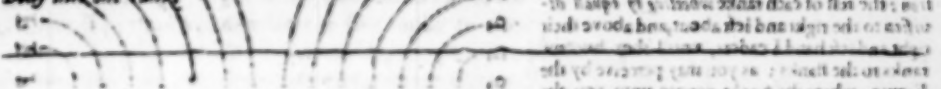
the ranks behind, open to the right and left: the one part going to the right, the other to the left, ranking even with the first, as before, and altogether making one Rank.

Fifthly, Ranks, then rank to the flank or flanks: when either the right hand man, or the left hand man (or both together) and as it were the Head of the motion, the rest of each Rank wheeling about them, to the right or left, for each hand by division, and the Ranks be brought into the distance, which was before the Rank; between the right hand man of the rank next before, and right hand man of the same rank you stand in. If it be to the left, then they wheel into the distance between the left hand-leaders of each Rank. If it be to the right, then the Rank wheel to the right: the other half, to the left, and produce a double Rank.

Sixthly, Files then rank by equal parts, when they rank three, four, five, six, seven, eight, or less (still keeping the number of men in ranks, of due proportion. If you rank three abreast (either to the right or left, and your File be but eight deep, then the first five men make two ranks, the third rank must be made up by the Leader of the second file. And so for all the rest. If you rank four, and the file be eight deep, then every file makes two ranks, work if you rank five, the file being eight deep, then the first five men make a Rank, and the first two men of the second file from the hand named, make up the second rank. Five of the other five, make up the third rank. And so forward for the rest. If the depth of the file were ten men, then it would make two even ranks.

Seventhly, Files then rank by unequal parts, when they either rank by progression increase or by decrease. As when every rank exceeds the rank before it by two, three, or four, be it more or less. Or else that each rank decreaseth, after the same manner.

Eighthly, Files then rank intire into the front, when there is so much distance between file and file, as will containe each file, rankwise: Every man in the file marching forward to the right or left, as shall be commanded, untill he stand even in rank with the leader of his file, which bringeth the Body into one rank.



# CHAP. XXXVI.

## Of Ranks wheeling by conversion.

IF I would strive to be curious, I should need no other subject to lengthen my discourse, but only this of Inversion and Conversion, which of it selfe would yeeld matter sufficient to make a booke. But I have taken a larger taste: And therefore like the Artists in Geography, who sometimes by a spot presents a Towne, and by a wrinkled line a large River: so must I crave of the favourable Reader, that in this small Treatise of Discipline he will not expect that I should enlarge my selfe so amply, as I might upon every part. For then my Booke would grow beyond his bounds, and I beyond my promise; but lest I be taxed for digression, this that hath already beene shewne may suffice for conversion. But because it may be expected, that I should shew conversion in Figure, as well as the other Motions, therefore to satisfy such, I shall demonstrate two Figures unto them, which may serve for all the rest. The one shall be of ranks wheeling by Conversion: the other of files ranking, sooner to the left. The word of Command for the first stands placed right over the figure.

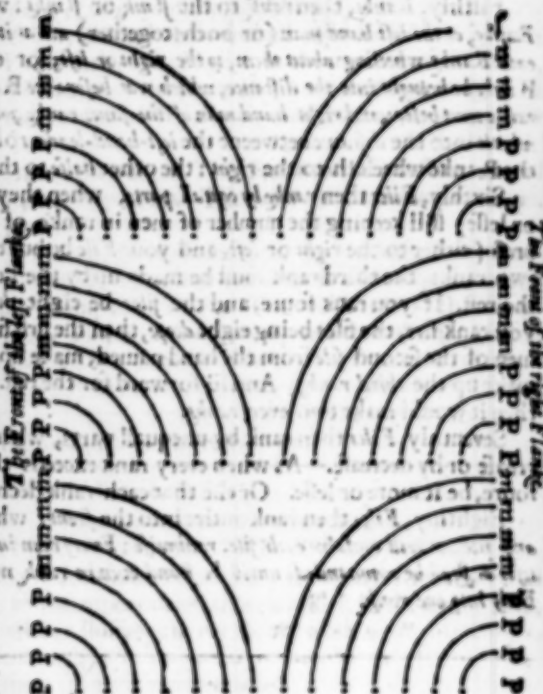
This

Ranks wheel to the right and left by division.

The first Form.

This figure of Conversion is of ranks wheeling to the right and left, or ranks tanking to each flank by wheeling. It is demonstrated rank filing, both in manner and matter, in the manner than, Where as to rank filing in the right and left, the right and left hand file leaders preserve and continue their places; and with that, their honour. In this wheeling by conversion to the right and left, contrariwise the rearmost file leaders become the foremost ones in the flank where they are stood; the which file leaders remaining ever within their places. Some may have called this, Ranks filing by Conversion, to the right and left, but corruptly. For conversion is always produced by ranks, as I formerly said, and likewise, files. But their mistake grows from this; that when Ranks wheel to the right or left, and left (so they) they by wheeling become file, or files, which is a palpable mistake. For when we have any command for wheeling it is a machine for us, to wheel ourselves to the hand or part named. By which doing, we either become ranks, or ranks, and not files as some have sought formerly to maintain. One use among many for this motion is. Let the speediest way for a great Body (if they have their due distance) to give fire to one, or two flanks, that as yet I know of. The way to perform this motion, is as followeth. The right and left hand-men of every rank, become the *Hinges* of the motion; the rest of each rank wheeling by equal division to the right and left about, and above their right and left hand Leaders, untill they become ranks to the flanks; as you may perceive by the Figure, where the prick denote unto you the places they stood in before the motion; the quarter circles, shewing the way of their motion, themselves being converted into two ranks, sheweth the motion executed. I have onely converted three of the ranks; for it would have taken too much room, to have wheeled all the ranks. And it is easie by this that is shew'd to conceive the rest. If you would avoid mixture of Arms, then place all your Musketeers, either in files, or Ranks, or else wheele onely your Musketeers, and leave your Pikes standing. Or it may be done, the body marching at length, the Musketeers being in the front and rear divisions. The word for the reduction is, Ranks, rank as you were.

The easiest way for the Reduction, will be full face to face about to the Rear, and then to wheel back into their places. Then face to their Leader; and they will be reduced as at first. Now we will come to shew the next figure of conversion, which is of files converted into Ranks by equal proportion.



PPPPMMMMMMMMMMMMPPPP

 PPPPMMMMMMMMMMMMPPPP  
 PPPPMMMMMMMMMMMMPPPP  
 PPPPMMMMMMMMMMMMPPPP  
 PPPPMMMMMMMMMMMMPPPP

CHAP.

Rear.

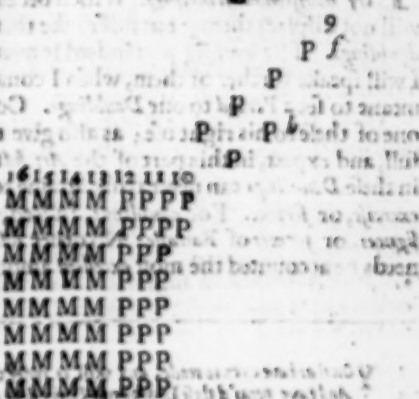
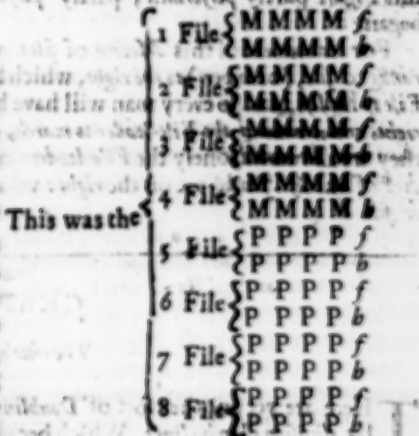
CHAP.

CHAP. XXXVII.

Of Files ranking in equal parades.

In this Chapter I intend to shew the manner of files ranking by Conversion in equal parades; which Motion I have seen used by some Commanders, at such times as their Companies have been but small, having not had above two or three files of Musketeers upon a flank; and being willing to march forth their Companies in divisions: And this, because that two a breast would be somewhat improper (unless it were upon necessity, in some narrow passage) and that three a breast, is also somewhat with the thinness. Therefore to augment the front of their march, they have shortened somewhat of their depths, in each division; by causing their files to rank four or five, according as their depth may be, when the Command shall be given. This Motion of conversion may also be usefull for larger bodies. For if upon a march you are to passe thorow some straight, where not above four or five can march a breast; and that being past thorow, you are to direct your course to the right or left: If your way be to the right, then cause your files to rank to the left: If to the left, then let the files rank to the contrary hand. For by so doing, having past the straight, and faced your body that way, which you intend your March by: commanding the file-leaders to march; and the half-files to stand, and take their places: your body will be led againe by their proper file-leaders, all a breast; the Musketeers becoming againe the flankers, which in the passage of the straight were in the front and rear. For the better understanding the manner of the Motion observe the following figure.

The way to performe this Motion, is as followeth. The Command being first given (as above-said) the right-hand-file-leader leadeth forth his File: and the three next men behind him move forward to the left of each other, untill they rank even a breast with their file leader. The ranking next foure in like manner ranking to the left, make the second rank. The File Leader of the second File placeth himselfe next after him that was the half-file-leader of the first, which now is become the right hand man of the second rank; the three next men behind him, making up of his rank in like manner. And so forward for all the rest, untill the Motion be fully perfected. This converts each file into two ranks; and brings all the proper file-leaders, and half-file-leaders, to make the utmost file to the right: the bringers up both of the front and rear half-files make the innermost file to the left. The figures of number which are on the left flanks of the figure, in which the word file added to each of them, demonstrates the places of the first, second, third, and fourth file, and so consequently for all the rest, according to their former standing, and the



places they now occupy, being converted into ranks. The letters *f* and *b*, which are placed on the right flank, shewes the places of those which were the *file-leaders*, and *halfe file leaders*: each of the proper *file-leaders* having now his *halfe file-leader* next after him. I have shewne this Figure partly performed, partly performing, and partly standing, as before the Motion began.

*Reducent.* For *reducent* of this Motion of files ranking, foure to the left: One way is, to cause yone rank to file, (or *draw*) to the right, which being done, Command every *File-leader* to *legd* up his *File* to the left: And so every man will have his place: For another way, *draw* the whole body to the right, and *standing* the *File-leader* to march, and *halfe-files* to stand, and take their places: and then they are all *standing*, onely the *File-leaders* of the right flank, are on the left; and the *File-leaders* of the left flank, are on the right: which is *reduced*, by any *insire Countermarch*, of ranks, or *file*.

## CHAP. XXXVIII.

### The conclusion of Doublings.

There are yet another sort of Doublings, both of length and depth, which are performed by *divisional wheelings*. Which because they have ever been accounted for *wheelings*, I will not displace them; but still ranke them in their former places: although in truth they are doublings. The *working part* indeed is *wheeling*; but the *intent*, or thing wrought, is *Doubling*. I will speake further of them, when I come to *show* them in their severall places. And here I meane to set a Period to our Doublings. Concluding, that those *Souldiers*, who can put every one of these to his right use; as also give to each his right *reducent*, must needs be skillfull, and expert, in this part of the *Art Military*. And contrairwise, they that are ignorant in these Doublings can never truly attaine to the right managing of a *Foot-company*, either for exercise, or service. For doublings, indeed, are the onely *Adotions*, for variety and alteration of figures, or formes of *Bataille*: No other *Motions* doing the like. And therefore Doublings must needs be accounted the most excellent amongst all the *Adotions*.

You it as have eyes to see, and skill to judge;  
And have pers'd these Doublings I have done;  
Though I have tedious beene, yet doe not grudge:  
For you know well, I have slept over some.  
But marvell not: the cause I doe not show them;  
It is not much materiall fort to know them.

Those that are skillfull in the Art of Warre,  
And take delight to exercise their Men;  
Shall find more pleasure in these doublings farre,  
If it as they intermixe them now and then.  
And so contrarie their doublings in these cases,  
And lastly one word brings them to their places.

Why in our Country doe we Captains chuse,  
That have no skill nor artfull inclination?  
They doe themselves, and Country much abuse;

Thus to deceive them in their expectation;  
I think the Cause of this fault in our Nation  
Is, that our Gentry holds not armes in fashion.

But some, perhaps, will say, I am too bold;  
There's no such need for Captains to have skill;  
The Master-masters have enough (I say bold)  
The Captains and the Counties for to fill.  
So wot the Master-masters with the labour,  
The Officers may ply upon a Tabour.

But say, me thinks, one puts me by the sleeve,  
And tells me that I have my selfe forgot;  
Wherefore of doublings, here I take my leave:  
Instructing those that read, mistake me not.

Let Master-masters take their money, then,  
But let the Captains exercise their men.



CHAP. XXXIX.

Of Countermarch: Their Antiquity, and words of direction.

**T**He next branch of Discipline which offers it selfe to your perusall, are Countermarches: which are of three kinds. To wit, Chorean, Lacedemonian, Macedonian: which is, Maintaining, Losing, and Gaining. Each of them are to be performed two manner of wayes. One by File: the other by Rank.

There are also Counter-marches, Intire, and Divisionall. But divers men are as diverse in their opinions concerning the Macedonian and Lacedemonian Counter-marches. Some will have the Macedonian, A Counter-march of gaining ground; because that it transfers the Battalia into the ground before the Front. Others will have it, A Counter-march of losse; because (say they) the Enemy being in the Reere, it makes a semblance of flying. Some will have the Lacedemonian, A Counter-march of gaining ground: because the Enemy appearing in the Reere, it makes a semblance of charging or falling on. Others call it, A Counter-march to lose ground: because it loseth all that ground the Battalia stood upon; taking in stead thereof, the ground behind the Reere. There are others of opinion, that there are Counter-marches of losse and gaine, in either of them. All these are furnished with reasons, to backe their opinions. But if I should stand to shew their many and severall reasons, I might well be thought to be without reason my selfe. My opinion is, that taking the ground before the Front, is gaining ground: and that to leave the ground we stood on, to take the ground next behind the Reere, is losse of ground: And yet to take either, whereby there is advantage gotten, must needs be gaining. But where the matter it selfe is so indifferent, it were fondnesse to spend longer time about it. Wherefore note, that Countermarches were of ancient use amongst the Greeks many hundred of yeares since, and from them learned and practised, by many other Nations; and so still continued unto this day. But as the Snow-ball by much rowling, becomes the greater: So, in like manner these Countermarches have received addition in all ages. So that the three originall ones are now become more then thirty, accounting those divisionall. And yet are all of them fathered upon one or other, of the three kinds. Though some of them will scarcely be owned or acknowledged; as you shall perceive, when I come to shew them in their severall places. But amongst all the Motions, this might be the best spared: as being least beneficiall, to this our moderne Discipline. But because that knowledge is no burthen; and that at sometimes they may be usefull; therefore first take the words of Command or Direction, which are as followeth.

Intire Countermarches by File.

Files { Right } hand, Countermarch. { Files to the { Right } Countermarch, every man turning  
to the { Left } } on the ground he stands.

File-leaders, face { Right } the rest passe { Right } and place your selves  
about to the { Left } through to the { Left } behind your Leaders.

File-leaders stand; the rest { Right } placing your selves  
passe through to the { Left } before your Leaders.

File-leaders stand; the { Right } placing your selves before your Leaders;  
rest passe through to the { Left } following your Bringers up.

Bringers up, face { Right } the rest passe { Right } and place your selves before  
about to the { Left } through to the { Left } your Bringers up.

Bringers up, stand; the rest of { Right } placing your selves behind  
the Body passe through to the { Left } your Bringers up.

Diversities  
of opinions  
concerning  
losing and  
gaining of  
ground.

To goe backe  
unto the  
ground, we  
have former-  
ly past, is  
losse of  
ground.  
Countermar-  
ches of great  
antiquity.  
Countermar-  
ches least  
usefull of all  
other parts  
of the Art  
Military.

Chorean,  
Lacedemo-  
Macedoni,

Bas. Coun-  
termarch.  
Bas. Coun-

Lacedemo.  
Lacedemo.

Intire



## Intire Countermarches by Ranks.

Cretan or  
Chorean.  
Lacedemo.  
Macedoni.

Rank to the } Right } Countermarch. } Rank to the } Right } Countermarch, every man turning on the  
Left } ground he stands.

Right hand File, face to the left: the rest passe through to the right: placing your selves behind your right hand men.

Left hand file may face to the right, and doe as much.

Basl. Countermarch.

Right } band File stand, the rest } Right } placing your selves on } Right } band men.  
Left } passe through to the } Left } the outside of your } Left }

Lacedemo.

Right } band File } Right } the rest passe } Right } placing your selves } Right }  
Left } Face to the } Left } through to the } Left } before your } Left } hand men.

## Divisionall Countermarches, by Files.

Countermarch Front and Reere into the midst.

Cretan, or  
Chorean.  
Basl. Countermarch.  
Lacedemo.  
Macedoni.

File-leaders, and halfe File-leaders, stand, the rest passe through to the right, and place your selves before your Leaders.

File-leaders, and Bringers up, stand; the rest passe through to the right: and place your selves before your Leaders and Bringers up.

File-leaders, face about; Bringers up, stand; the rest passe through to the Right; and place your selves behind your Leaders and Bringers up.

Basl. Count.

Front-half-files, interchange ground with the reere.

## Divisionall Countermarches by Ranks.

Chorean or  
Cretan.  
Lacedemo.

Countermarch your (wings) or Flanks into the midst (or Center.)

The outmost file of each Flanke, face outward: the rest passe through to the right and left; placing your selves before your outside men.

Macedoni.

The outmost file of each Flanke, face inward: the rest passe through to the right and left; placing your selves behind your outside men.

Basl. Countermarch.

The outmost file of each Flank stand: the rest passe through to the right and left, and place your selves on the outside of your outside men.

Interchange your Flanks.

Note what is done by the outmost Files, may be reduced by contriverting the command to the innermost Files; but must be done before they have closed their divisions, &c.

## CHAP. XI.

Of the Chorean Countermarch: and the way to performe it.

*The distance for Countermarch is, six feet, or open order in rank and file*

I Could willingly have prickt a Figure, for each of these Countermarches, but that they will take up too much roome. And therefore I will only prick some few of the hardest of them; and for the rest, I will endeavour by words to make them as easie as I may: that so they may be apprehended by the meanest capacity. And first I will begin with the (Persian, Chorean, or) Chorean Countermarch. The word of Command, or, Direction is,

Files to the right hand, Countermarch.

This Chorean Countermarch, is by some called the Moderne Countermarch. I conceive their reason to be, because that it is more in use then any of the other: Or else, for antiquity, it might claime

claime many Ages. It is a *Counter-march* maintaining ground: for it worketh its effect on the same ground it stands; neither losing nor gaining. But it transfers the file-leaders into the place of the bringers up: and the bringers up into the place of the File-leaders: withall turning the aspect of the Body, or *Battalia*, to the *Reere*. The way to performe this motion, is as followeth. As soone as the *Word of Command* is given, if it be to the right, then all the file-leaders step forwards with their right legs, and face about to the right; every file-leader with his file following him, passing downe towards the *Reere*, through the intervall on his right hand, still observing to keepe even in rank with his right-hand man. But by the way, note that no man must turne untill he come to the ground, whereat first his file leader began the *Counter-march*. This motion is then performed, when the bringers up have attained unto the place where before their file leaders stood; being faced right after them. *Files to the left hand Counter-march.*

To *Counter-march* to the left, worketh the same effect; and is done after the same manner onely differing in the hand.

*Note that when there is a Counter-march commanded with out any other addition, then it is alwaies intended a Chorean Counter-march. Observe the direction for the Chorean Counter-march.*

For *Reduement*, if you counter-march to the right; doe as much to the left; and they will be as they were. For any intire *Counter-march* of files will be reduced (of what kind soever) by making another intire *Counter-march*, to what hand soever.

But if any desire to be so *curious*, as to have them not onely reduced to the same aspect, but also precisely to the same place, then if the *Counter-march* were to the right, counter-march againe to the right; if to the left, accordingly to the left.

## CHAP. XLI.

### Of Counter-marching to lose ground.

#### The Command is.

*Files to the right, Counter-march: every man turning after his Leader on the ground he stands.*

**T**His *Lacedaemonian Counter-march*, is a *Counter-march* of losse of ground; for that it leaves all the ground the *Battalia* formerly did containe, and in lieu or place thereof taketh the ground behinde the *Reere*. This counter-march is to be performed, when the Body is upon a stand. And (as the *Chorean*) it turnes the Aspect towards the *Reere*. The *Greeks* were wont with this counter-march to bring their File leaders to oppose any enemy appearing in the *Reere*, thereby gallantly bearding their enemies in the teeth: neither politickly making shew of Flight, whereby to bring the enemy into disarray; nor over providently carefull of the advantage of ground. The motion of this *Counter-march* is to be performed as followeth. The file-leaders of each file are to step side-waies to the right, and therewithall to face about to the *reere*; and so march even in rank together downe betwene the *Intervalls*; no man advancing a foote forwards, but turning in like manner after their leaders, when they are past by them; still observing to keepe their due distance. And so a whole rank together, still turning off to the right, each rank successively doing the like, untill the counter-march be fully performed. Any intire counter-march of files will reduce this. But for order sake, take one of the same sort to the contrary hand, which is,

*Files to the left, counter-march: every man turning after his leader, on the ground he stands.*

I shall not need to speake further concerning this counter-march of losse of ground to the left: seeing that it differs from the other onely in the alteration of the hand. The substance and effect of both being one and the same: onely I will now speake of a second sort of counter-march, which is of the same kind. The command is;

*Bringers up face about to the Right; the rest pass through to the Reere, and place your selves before your bringers up.*

This *Lacedaemonian Counter-march* doth also lose the ground whereon it formerly stood, and takes the ground behind the *Reere*: the manner of the motion is as followeth: The last Rank

*\* An interval is the space of ground betwene file and file, or rank and rank; but in this place is intended the space of ground betwene the files.*

*Lacedaemon. or*

or Bringers up, face to the Reere, and stand : the rest of the Body facing about in like manner, and passing through or betwene their bringers up, and placing themselves even in Rank before them. The motion is begun by the Rank next the Bringers up, and so continued successively by the rest, untill the Countermarch be ended. It may be reduced by doing the same to the contrary hand. Nevertheless, for brevity sake, I will make use of a sprig from the same bough, and reduce this Lacedemonian Countermarch by another of the same kind. The command is,

*Lacedemon* Bringers up, stand, the rest passe through to the Right, and place your selves behind your Bringers up. This Lacedemonian Countermarch is thus to be performed ; the last Rank (or Bringers up) are to stand, and the rest of the body to face to the Reere, and passe through to the Right, and place themselves behind their Bringers up, contrary to the Countermarch last shown, where they placed themselves before. The motion is also begun by the second Rank from the Reere, the rest following successively, untill the File-Leaders are become the bringers up : Then face them about after their proper File-leaders, and they are reduced.

## CHAP. XLII.

*Of Countermarches to gaine ground, or the Macedonian Countermarch.*

The command is,

File-leaders, face about to the right, the rest passe through to the right, and place your selves behind your leaders.

*Macedonian.*

*Macedon.  
countermar.  
makes sem-  
blance of  
flight.*

THIS Macedonian Countermarch is for gaining ground, for that it leaves the ground the Battalia formerly stood upon, taking in lieu thereof, the ground next before the Front. It also turns the aspect towards the reere. The motion of this countermarch is from the reere to the front, contrary to the Lacedemon, whose motion is from the front to the reere : This Macedonian countermarch, makes semblance in the reere of flight, but presently produceth an orderly filed front, when perhaps the enemy, with a too early pursuit, hath broken the order of their army.

The way to performe this countermarch, according to the directions formerly given, is as followeth : The file-leaders or first ranke, face about to the right : the rest of the body passe through betwene the Intervalles, (or distance of Files) to the Right : and place themselves behind their Leaders ; every ranke (beginning with that next the file-leaders) passing through successively, and taking their places, untill the Countermarch be fully executed. It may be reduced as the rest, by doing the same to the contrary hand ; or as I have formerly said, by any intire Countermarch of file ; and therefore I will reduce it by another Macedonian Countermarch. The command is, as followeth.

File leaders face to the Reere, the rest of the Body passe through to the left, following your bringers up, placing your selves behind your leaders.

*Macedonian.*

This Macedonian Countermarch is rather remembered for its antiquity, then excellency, (as some more of them be) nevertheless if any will be curious to observe the motion, it may be performed as followeth : The first ranke (or file-leaders) face to the reere, then the last ranke begin the countermarch, passing forward betwene the Intervals, the seventh ranke following the eighth, the sixth following the seventh, and so likewise the rest untill the whole body be transferred into the ground before the front, and then joyntly together, facing to the right about, after their leaders, the countermarch is ended. For reduction, observe this for all, that any intire Countermarch of file, may be reduced by another intire countermarch by file, of what kind, or to what hand soever.

These three last Chapters of countermarches, are the originall grounds of all the rest, yet I shal shew one in the ensuing Chapter which time hath begotten out of the latter two, which takes part with either, being absolute in neither.

CHAP.

## CHAP. XLIII.

*Of the Bastard Countermarch.*

The Command is,

*File-leaders stand, the rest passe through to the right, and place your selves before your Leaders.*

**T**His passing through (or *Bastard countermarch*) is partly *Macedonian*, and partly *Lacedemonian*; for first with the *Macedon*, it takes the ground before the *front*, the *Motion* being from the *Reere* forward: it is partly *Lacedemonian*, for that they passe through, and place themselves before their *Leaders*, and for that it makes semblance of *falling on*, or *charging* the enemy: nevertheless the *Macedonian* disclaims it, for that it alters not his *Aspect*: The *Lacedemonian* refuseth it, for that it takes the ground before the *front*, and not that behind the *Reere*: and with the *Chorean*, it holds no affinity. And indeed many there be that will not allow it for a *countermarch*, for certaine the word it selfe will not beare it; notwithstanding seeing that it hath beene long ranged amongst them, I will not be he that shall displace it, but will passe forwards, to shew the manner of the *motion*, which is to be performed as followeth. \* The *File-leaders* stand, according to the former direction, the rest of the *body*, advance their *armes*; the *second Ranke* first passing through the *right*, and placing themselves before the *first Ranke*, the *third Ranke* before the *second*, the *fourth* before the *third*, and so forwards for the rest, untill the last *Ranke* (or *bringers up*) are become the *foremost*, which perfects the *motion*. It may be severally usefull, as to *skirmish* against an enemy, advancing by way of *introduction*, or upon occasion, to bring the *Reere* men to *march* in *front*, and such like. For the *Reduement*, you may doe, as much to the *contrary band*, onely for order sake, I will reduce it, by another like it selfe.

\* *Instru-  
tions in per-  
forme the  
motions of  
this Counter-  
march.*

*This bastard  
Countermarch  
is the same  
with intro-  
duction.*

The Command is,

*File-leaders stand, the rest passe through to the right, placing your selves before your Leaders, following your bringers up.*

This *motion* may be done either to the *right* or *left*, and is nothing differing from that last shewn; but that, whereas the *other* began with the *second ranke*, this contrariwise begins with the *last ranke*, (or *bringers up*) every *Ranke* successively following the *Ranke* which came from behind them, untill they which were the *leaders* are become the *last* in the *Reere*. If this *Countermarch* be first done, it may be reduced by any of those formerly shewn, &c.

*Bast. Coun-  
termarch.*

## CHAP. XLIV.

*Of Countermarching Ranks to maintaine ground.*

The Command is,

*Ranks to the right hand Countermarch.*

**T**His *Chorean Countermarch* of *Ranks*, is an altering or changing of one *Flanke* for the other, the *Chorean Battalia* still keeping the same ground, onely the *right flanke* becomes the *left*, and the *left* becomes the *right*. The way to performe this *motion*, is as followeth: the command being given, then the whole *body* faceth to the *band* named, and every man in the *outmost File*, to the *right*: (*files* by this facing, being become *rankes*) turnes downe through the *Intervalle*, or (*distance* betweene *rank* and *rank*) marching forth right unto the part, which was the *left flanke*, with their *rankes*, *file-wise* following them; being come unto their ground, they face as before, and the *Countermarch* is performed: for the *reduement*, let *Ranks* countermarch to the *left*, after the same manner, differing onely in the hand, and they are as at first.

H

CHAP.



## CHAP. XLV.

*Of Countermarching Ranks to lose Ground.*

The Command is, *Rank to the right-hand Countermarch*, every man turning after his right-hand-man, on the ground he stands.

*Lacedemon.  
Ranks by  
this facing  
become files,  
and files so  
the contrary  
become ranks*

**T**His Lacedemonian Countermarch of Ranks, is a falling on upon the left flanke: the Motion being begun by the right; It leaves all the ground, the Battalia stood on, and takes in place thereof the ground beside the left Flanke, turning the Aspect to the left: The manner or way to performe this Motion, is as followeth: The whole Body faceth to the right; and then the right-hand-file being faced, (becomes a Rank) begins the Countermarch, turning downe the Intervals of the Ranks, (which by this facing, is made the distance betweene the Files) and so marcheth forth right, beyond that which was the left flanke, every man following him that was his right-hand-man (but not stepping forwards one foot of ground) untill the Countermarch be performed. For the Reducement of this Countermarch, doe as much to the left, and they will be as at first: Or (if you please) take another of the same kind; The word of Command, or Direction, is *Right hand-file, face to the right, the rest passe through to the right, and place your selves before your right-hand-men.*

*Lacedemon.*

This Lacedemonian Countermarch of Ranks, makes a falling on upon the right Flanke, the Motion being from the left flanke, to the right, leaving all the ground whereon the Battalia stood, and taking in lieu thereof, the ground beside the right Flanke. In those dayes, when Countermarches were more usefull, and accommodable to their Military Practises and Discipline, then now they are for ours; the Lacedemonian Countermarches were of chiefe repute, as well amongst the Macedonians, as the Spartans, and others: the way to performe this Motion is as followeth. The right-hand-file faceth to the right, the rest of the body facing to the right, doe passe through the Intervals or spaces to the right: placing themselves before their right-hand-men, untill the left-hand-file, become the foremost Rank; If you doe this Countermarch by it selfe, then for Reducement; first face them to their Front proper, then let the left-hand-files face to the left, and doe as much to the left; and then they will be as at first.

## CHAP. XLVI.

*Of the Macedonian Countermarch by Ranks.*

The Command is, *Right-hand-file face to the left, the rest passe through to the right, placing your selves behind your right-hand men.*

*Macedonian*

**T**His Macedonian Countermarch of Ranks, contrary to the Spartan, dismarcheth from the enemy upon that Flanke where he appeares, and presents the contrary Flanke to receive the Charge. It is performed after this manner. The outmost-file to the right, faceth to the left. The rest of the Body, or Battalia, faceth to the right; every man passing through to the right, and placing themselves behind their right-hand men: For the reducement of this Countermarch, as all the rest, there are divers, and severall wayes; but performe as much to the left, as you have done to the right, and they will be as at first: Or if you please, this following Bastard Countermarch will doe the same.

The word of Command or direction is,

*Right-hand-file stand, the rest passe through to the right, placing your selves on the outside of your right-hand-men.*

*Bast. Countermarch.*

This passing through, or Bastard countermarch of Ranks, doth alter both ground and flanke; (still reserving the Aspect, without alteration.) It is to be performed as followeth: The outmost or right-hand-file stands; the rest of the Body, facing to the right, passe through to the right, every man placing himselfe on the right side of his right-hand-man, and so standing even in Ranks, the Motion still continuing, untill the left-hand file is become the right; the right, the contrary. If this Countermarch be done alone, for the reducement; let the left-hand file stand, and doe as much to the left, as before to the right, and they will be as at first.

CHAP.



CHAP. XLVII.

Of Countermarching Front and Rere into the middest.

For the Intire Countermarches, I have indeavoured to expresse them, as well as I could in words, but for the divisionall Countermarches, I intend to demonstrate, both in word and figure, whereby they may be the more easily apprehended by such as shall be desirous to know them: notwithstanding, before I enter upon the divisionall Countermarches, I would willingly cleare one thing which by some will be carp'd at, which is, the using of the word *Middest*, instead of the word *Center*: The word *Center* (I confesse) hath beene the more usuall word amongst us: and yet it is not altogether so proper to our use as the other; wherefore give me leave, without offence, to use those words, which are not onely more proper, but more significant. The *Midst* of the Battell, is to be understood, either from the *Front* and *Rere*, or from both *Flanks* (or *Wings*): If between *Front* and *Rere*, the *Midst* must be betweene the halfe file-leaders, and the *Rere* rank of the *Front* halfe-files, extending it selfe from *Flank* to *Flank*: The *Midst* betweene the *Flanks*, is betweene the two innermost files; continuing the whole depth from *Front* to *Rere*. The *Center* is truly the extremest part, tittle, or point in the midst of a circumference, and therefore not so pertinent to expresse the intention and true understanding of the Motion, as the word *Middest*. Wherefore not to trifle time in matters so apparent, we will proceed to our first divisionall Countermarch, which shall be *Chorean*.

The Command is, Countermarch Front and Rere into the midst.

The Direction is,

Halfe-files face to the Rere; Front halfe-files turne off to the right; Rere halfe-files to the left.

Front.



Chorean.

Rere.

This divisionall Chorean Countermarch, brings our File-leaders, and brings up together in the midst, and the ranks that were in the midst into the Front and Rere. It is a Countermarch maintaining ground; for every man marcheth up into his leaders ground, before he faceth about to countermarch: The way to performe the Motion, is as followeth. The command being given to

countermarch, either let the Commander, or some other of the Officers, command the halfe-files, to face about: then the file-leaders stepping forwards, with the right leg, face about to the right, passing downe the Intervals on the right hand, the rest of the Front halfe-files, following their Leaders, and not turning, untill they come to the ground, where their Leaders turned down before them: The bringers up with the Rere halfe-files, at the same instant turning downe their Interv-

vals, on the left hand, the rest of their division following them, untill the file-leaders and bringers up meet together in the midst of the Battell, and then having faced all to their leader, the Motion is performed. For the Reductment of this figure, doing the same thing over againe, will reduce it. Or any other divisionall Countermarch of File.

H 2

CHAP.

## CHAP. XLVIII.

*Of bringing Front and Reere together, into the midst, by the Bastard Countermarch.*

The Command is.

*File-leaders, and half-file-leaders stand, the rest passe through to the right, and place your selves before your Leaders.*

**T**His Bastard Countermarch, doth bring the Leaders and Bringers up together, into the midst, and saves two facings, and is quicker performed, then the other last done, or any other in the precedent Chapters: The way to performe the motion, is as followeth: The first Rank stands: and the half-

*Note that as the Front halfe files emptyth file-leaders stand, then those of the Front half-file passe through their Intervalls to the right, placing themselves before their file-leaders: The second Rank before the first, the third before the second, the fourth before the third; the Reere halfe files at the same instant doing the like, and placing themselves before their halfe file leaders, as the other did, before their file leaders: This Motion may be either reduced by doing the same over againe to the contrary hand, or else by Countermarching Front and Reere in the midst, or by any other of the divisionall Countermarches of Files.*

*Another way of bringing the front and reere into the midst, by the Chorean countermarch.*

The Command is, *Front and Reere halfe files, Countermarch to the right.*

*Chorean.*

**T**His Chorean countermarch doth also bring the file leaders and bringers up together into the midst, and turnes the aspect towards the Reere, making the halfe file leaders, the file leaders accidentall. The countermarch is easie and quickly performed; the manner is as followeth; (The command being given as aforesaid) the front halfe files countermarch to the right, following their file leaders. The Reere halfe files in like manner, and at the same time countermarch to the right, following the halfe file leaders, every file leader falling directly after his bringer up.

*Reduement*

For Reduement, countermarch front and reere Into the midst; then face to the first front, and they are as at first.

*Part countermarches.*

Sometimes occasion may require a part countermarch, as when the Front halfe files, Reere halfe files, halfe ranks of the right, halfe ranks of the left, or any other part of the body (more or lesse) doth countermarch to either hand, not intermixing with the standing part of the body: and these part countermarches may be performed either after the Chorean, Lacedemonian, or Macedonian way: nevertheless, I willingly forbear to enlarge my selfe, rather with the dogs of Nile run and lap, giving onely a touch of these things, and away; leaving others more amply to proceed that shall affect more curiosity; whilst I proceed to the next Chapter and Countermarch,

## CHAP. XLIX.

*A divisionall Countermarch to make a large Intervall between the first and last ranks.*

**T**His Divisionall Lacedemonian Countermarch makes semblance of charging or falling on to the front and reere; leaving all the ground which was occupied by the Souldiers between Front and Reere; transferring them into the ground before the Front, and behind the Reere. The ground (or place) of the former standing, by this Motion becoming vacant; which I have demonstrated in the Figure by the prick. This Countermarch notwithstanding that it beare the name of the Lacedemon, yet the Motion of the front halfe files is after the manner of the Bastard countermarch; that of the Reere halfe files onely being after the Spartan guise. The command, direction, and figure are as followeth.

The Command is, *File leaders and bringers up stand, the rest passe through to the right and place your selves before your leaders, and bringers up.*

*Lacedemon,*

The Direction is, *Halfe files face to the Reere.*

Front.

Front.



Rear.

The way to performe this *Motion* is as followeth. The *halfe files* are commanded to *face* to the *Rear*; and then the *front halfe files* passe through to the *right*; placing themselves before their *leaders*; the *second rank* before the *first*, the *third* before the *second*, the *fourth* before the *third*; the *rear halfe files* at the same instant passing through to the *Rear* after the same manner, and placing themselves before their *bringers up*. You may perceive by the *Figures* of *Number* placed on the *flanks* of the *Figure of Battell*, both how the men stood before the *Motion* began, as also, how, and in what place they stand, the *Motion* being ended. For the *re-ducement*, if you have not closed their distance, you may *face* them *about*, and so let them passe againe into their places: Or else, by doing the same *countermarch* over againe, or to the contrary *hand*, or any such like way, will *reduce* them. This next following *countermarch* will also *reduce* them, or this will *reduce* that. The *Command* and *Direction* is, as you shall finde it placed over the *Front* of the *Figure*.

CHAP. L.

Of making a large intervall betweene the first and last rank, by the *Macedonian Countermarch*.

THIS *divisionall Macedonian Countermarch*, is little different from that next before it, onely the other turned the *Aspect* outward, to the *front* and *rear*; this *Countermarch* turns the *Macedonian Aspect* inwards, towards the *midst*. It may be usefull, if the *Commander* would shew or publish ought, before his best *Souldiers*, for that it not onely leaves a large distance, but that it brings the best *Souldiers* into the *midst*, with their *Aspects* directed inwards: It may also serve to conduct any great *Personage* crosse the length of your *Battell*, whereby to shew them the *bravery* of your *Souldiers*, &c. The *figure* followeth.

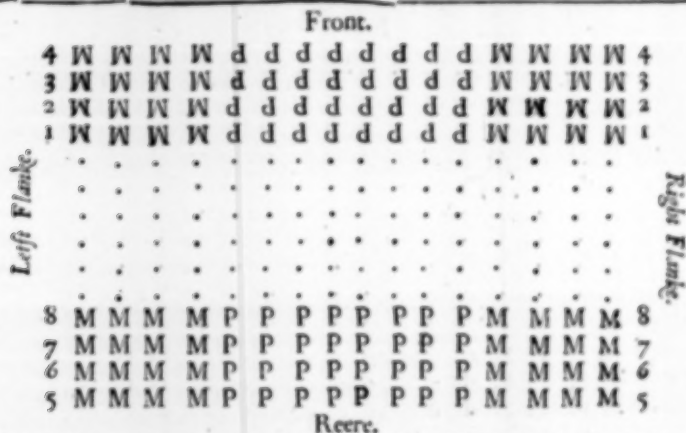
The *Command* is,

*File-leaders face about, Bringers up stand, the rest passe through to the right, and place your selves behind your File-leaders and Bringers up.*

The *Direction* is, *Halfe files face to the Rear.*

H 3

Front.



*Note that when the rear half files face about, the last ranks, which are the bringers up, are still to keep their standing.*

The Motion of this Countermarch may be thus performed: The first rank (or file-leaders) face about, the last rank stands, the *Reere* half-files face about, and so the *Front* division passe forwards, and place themselves behind the file-leaders, the *Reere* half-files behind the bringers up. The manner you may perceive the plainer, if you note the *Figures* of number, which are placed on the flanks of the *Figure*, their number shewing the places they had from the *front* before the motion began. This *Figure* may be reduced, either by the same word of *Comin* and which produced it, or else by any of the foregoing divisionall Countermarches. Our next shall be a Countermarch of exchange of ground. The words for *Comin* and *Direction*, follow in the next Chapter.

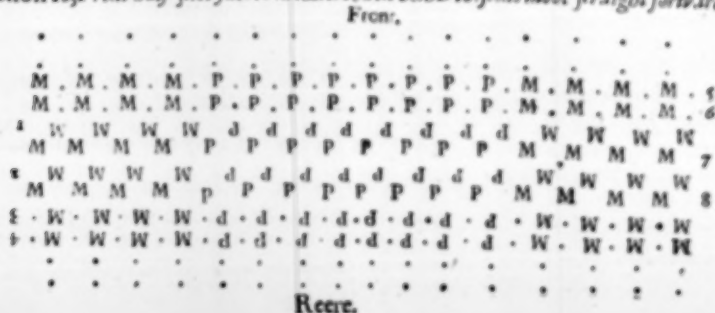
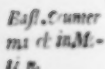
## CHAP. LI.

*Of interchanging Ground.*

**T**His *interchanging of ground, or Bastard Countermarch* may not rightly be said to be derived from any one of the particular grounds of *Countermarch*; but rather participating of them all; And yet considering it actually performed, it is different from them all: for whereas the other *Countermarches* of files in *division*, although they bring the *front* and *rear* into the *middle*, yet the *front halfe files* continue still on the same part, and the *rear halfe files* do not alter into the places of the other. But this, contrary to any other of the *divisionall countermarches*, transfers the *front halfe files* into the ground or place of the *rear halfe files*; and them into the contrary part, bringing the *file leaders* and *bringers up* together into the *midst*. The following Figure demonstrates the body in motion.

The Command is, *Front and Rear half Files interchange ground.*

The Direction is, *Front half-files face to the Rear when both Divisions move straight forwards to the right.*



The

The way to performe this *motion* is as followeth. The *Front halfe-files* face about, passing forward to the *right* (being led by the *bringers up* of the *front halfe files*) between the *Intervals* toward the *reere*; The *reere halfe files* at the same instant in like manner *marching* forwards, betwene the *Intervals*, on their right hands into the *front*, untill the *front-division* have attained the places of the *reere*, and they contrariwise, the places of the *Front*. For the *Reduement* of this *Reduement* counter-march, doe as much backe againe: Or if you would *reduce* it some other way, you may first make an *intire counter-march* of *files*, and then *counter-march* *front* and *reere*, into the *midst*; for under two *counter-marches*, it will not be *reduced*. Now I will passe to the *divisionall counter-marches* of *rank*, or *flank*; The first shall be *Chorean*; as in the *Chapter* following.

# CHAP. LII.

Of Counter-marching the *flanks* (or *wings*) into the *midst* of the *Battell*.

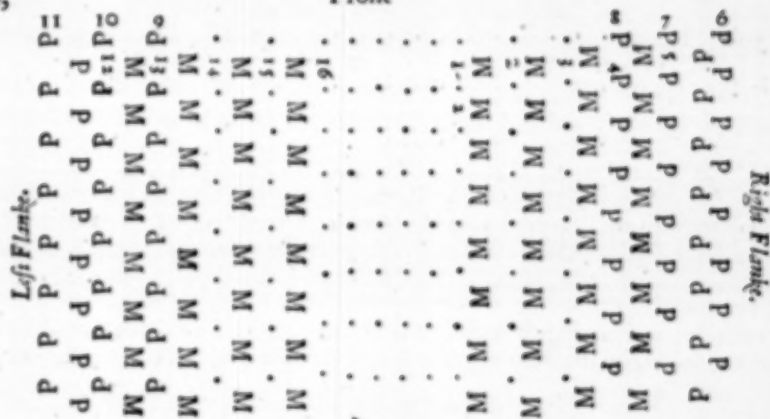
THIS *Chorean counter-march* of the *Wings* (or *flanks*) into the *midst* is ordinarily used when the *Commander* would bring the light armed into the *midst* of the *battell*, to secure them from the incursions of the *Horse*. It is a *Motion* too dangerous to meddle withall in the eye of the *Enemy*, although the *Souldiers* be expert, but by no meanes to be thought upon in the field, amongst the untrained and unskillfull. This *counter-march* performes the *Motion* on the same ground. The *Figure* followeth.

The Command is, *Counter-march your flanks into the midst.*

The Direction is. *Face to the Right and Left.*

Chorean,

Front



Reere.

The command being given, the whole body *face* to the right and left by *division*; the *outermost files* by this *facing*, becoming *rank*, every man in the right hand *file*, being a leader to his *halfe rank* *file-wise*, bring of and so likewise in the left hand *file* the same, then they *counter-march* the right *flank* to the right, the left *flank* to the left, which you must always observe to doe, and your *flankers* will meet just in the *midst* of your *Battalia*. Lastly, having *faced* them to their first *front*, the *counter-march* is ended.

To *reduce* them, they may either use the same *Counter-march* againe, or any of these following *divisionall counter-marches* of *Flank*, (unlesse it be that of *interchanging* of ground.) The next shall be *Lacedemonian*: the Command and words of *Direction*, are, as in the *Chap.* following. the left, for if they should both *turne* off to the right, they will never meet right, if they *turne* off both to the left, it will be as bad.

Note that upon the Counter-march, bring of the right flank into the midst, the right flank must always observe to turne to the right, the left flank to

CHAP.



## CHAP. LIII.

Of Countermarching to take the ground on the outside of the Flank, the Aspects outward.

**T**His Lacedemonian Countermarch of halfe flank or rank, makes semblance of charging on, and issuing forth upon both flanks, but leaves a large waste distance of ground, unoccupied between the two outmost Files, or midst of the Battaille.

The Command and Figure followeth.

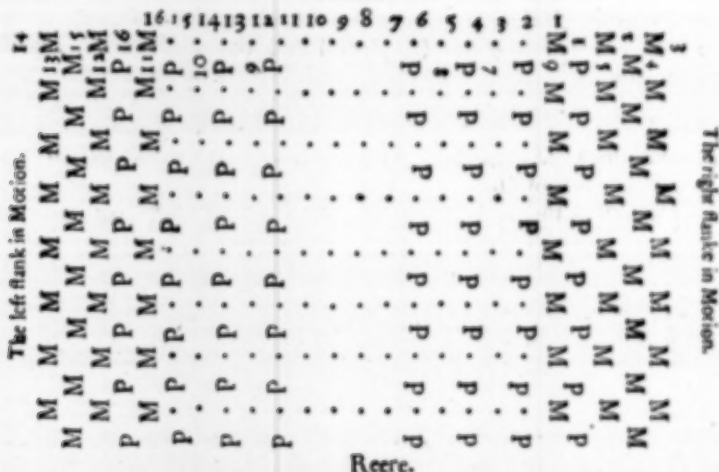
The Command is,

The outmost file of each flank, face outward, the rest passe through to the right and left, placing your selves before your out-side men.

The Direction is, Face to the right and left.

Lacedemonian.

Front.



Reere.

The way to performe this Motion is as followeth. The right-hand-file faceth to the right, the left-hand-file to the left; the rest of the body faceth to the right and left, the right flank passing through to the right, and placing themselves, before their right-hand-men. The second file from the Right, begins the Motion on the right Flank; the left flank in like manner, passing through to the left, and placing themselves before their left-hand-men; the second file accounting, from the left, begins the Motion on the left flank: But you must note, that the files become ranks with the facing.

Reduement.

For the reduement of this figure, if you will first face them to their proper front, you may then command the two inmost-files stand, the rest passe through to the right and left inward, and take their places: Or if you please, make use, either of a Chorean, or a Macedonian Countermarch of Ranks by division, and with a facing, and closing their divisions, they will be perfectly reduced.

## CHAP. LIV.

Of Countermarching to take the ground on the outside of the Flank, and to direct their Aspects inward.

**T**His Divisionall Macedonian Countermarch, differs but little from the Countermarch of the last chapter; except it be in the alteration of the Aspect: for whereas the last Countermarch turned the fronts of each flank outward; this contrariwise directeth them inward, causing each flank to confront the other in opposition. The Command and Figure are as followeth.

The

The Command is, *The outmost file of each flank face inward, the rest passe through to the Right and Left, placing your selves behind your outside men.*

The Direction is, *Face to the right and left.*

*Macedonian,*

*Front.*



*Reere.*

The Motion is thus performed, the outmost file of each flank, *face inward*: the rest of the body *face to the right, and left, outward*, those of the right flank passing through to the right, and placing themselves behind their right-hand men. Those of the left flank passing through to the left, and placing themselves behind their left-hand men: The Motion is begun, by the second file, from each flank. I might here shew these Counter-marches, beginning their Motion from their middlemost-files; but I am willingly silent, hoping that these may suffice to the courteous, not much forcing my selfe to give satisfaction to the curious. For the reduction of this Counter-march having faced them to their first front, you may if you please, command the two innermost files, to face outward, the rest passe through to the right and left inward: placing themselves behind their right, and left-hand men: which being done, the whole body will stand faced to the right and left outward, Then being faced to their Leader, they are reduced. If you would reduce it by some other way, you may make use, either of the Counter-march, which is next before, or of that which next followeth: Or of any other divisionall Counter-march of Ranks; (which doth not interchange ground.) Our next two which follow, will be *Eastward Counter-marches*, with the which we will conclude this our fourth branch of Discipline.

*Reduction*

## CHAP. LV.

*Of taking the ground on the outside of the flank, not altering the Aspect.*

**T**His Divisionall Eastward Counter-march, produceth the same effect with the other two next before it wrought; only differing in the Aspect: for the Lacedemonian turned the Aspect outward; the Macedonian turned the Aspect inward; and this keeps the Aspect still directed the same way. He that knowes every way, may when time serves, make use of those wayes which are most necessary and futable to this present occasion: and the Proverb saith, *Knowledge is no burthen*. The Command and Figure are as followeth.

The Command is, *The outmost file of each Flank stand, the rest passe through to the right, and left, and place your selves on the outside of your right and left-hand men.*

The Direction is, Face to the right and left.

Front.

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
The Left Flank in Motion.	P	M	M	M	.	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
The Right Flank in Motion.	P	M	M	M	.	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P
	P	M	M	M	M	.	.	.	.	.	.	.	.	.	.	M	M	M	M	P
	P	P	P	P	.	.	.	.	.	.	.	.	.	.	.	P	P	P	P	P

Rear.

The way to performe this Countermarch is as followeth (according to the Command) the outmost file of each flank stands; the rest of the Body face to the right and left outward, the right flank passing through to the right, the left flank to the left; those of the right flank, placing themselves on the outside of the right-hand men: in like manner, those on the left flank, placing themselves on the outside of their left-hand men.

The reduction.

It may be reduced, either by any of the foregoing divisionall Countermarches of Ranks, or else being faced, to any of the flanks, then the ranks become files. And by divisionall Countermarches of files, you may reduce divisionall Countermarches of Ranks, or by Ranks, files; onely you must observe some facings: Yet for this Figure, if you please, Command the two innermost files stand; the rest, face to the right and left inward, and so march into their place. The next shall be a Countermarch of interchanging of flanks.

## CHAP. LVI.

Of interchanging ground by the Flanks, and bringing the innermost files of Pikes, to become the outmost Ranks.

Note, that if you please, you may pass the Pikes alone the way, and let the Musketeers stand. But then there will be a large distance between the Musketeers in the midst.

This Exchanging of Flanks, is a bastard Countermarch, but differing from all the other Divisionall Countermarches of Ranks; for this transfers the right flank into the place of the left, and the left into the place of the right. It is very apt to receive a charge from the Horse; for as soone as they shall be commanded to Interchange their flanks; they face to the right and left inward, and then the innermost files of Pikes begin the Motion, the rest of each flank, following orderly filewise, the Pikes parting, so soone as they begin to move, and charge as they see occasion. If need be, the Pikes may charge at the foot, and the Musketeers give fire over them: If any object that the Pikes will have too large a distance, they may close at their owne pleasure, so soone as they have past through. The Command and Figure are as followeth.

The command is, Interchange Flanks.

The Direction is, Face to the right and left inward, and march.

Front

For the *Redoubment*, you may, if you please, interchange ground againe: nevertheless if you would reduce it by some other way, *Countermarch* your flanks into the middlest, and then an *intire countermarch*, either of *Ranke* or *File*, will reduce them.

I might have further enlarged my selfe upon this subject, both in *Command* and *Figure*; but it may be that some wil find fault with these which I have already penned, concluding them for *nickies*, and for no Service; because they cannot presently apprehend for what use or service they may be fit. Notwithstanding I would intreat such (if any such happen to be my over-lookers) that they would suspend their censures, untill they have fully informed their judgements. Yet thus much I will conclude with them, that *Countermarches* might the best be compared of all the *Motions*, as being least beneficiall to this our *Moderne discipline*. And yet to very good use, many of them might serve, if our Souldiers were well practised in them. Nevertheless such is the willfull stupidity of the times, that many good and usefull things are disreputed, and accounted of no use, because the Souldiers wanting skill, cannot performe them as they ought; which would the Officers take more paines, by often instructing their Souldiers, the hardest motions would become facile and easie. And to say truth, the greatest fault is want of skill in those which should have instruction to others; and yet they will not sticke to carp at such as shall shew more then they, concluding such things for superfluous and improper, which they themselves doe not rightly understand: But lest I be taxed for digression, I will conclude this branch of *Discipline* with these few lines following.

Some burthned are with more Command then skill,  
Which had they power saying to their mind,  
You then should see reason inbrall'd to will,  
Nor any have their knowledge should you find;  
For rather then they'l study to learne better,  
They wish all wanting, none to know a letter.

So be there many Officers in Bands,  
That neither know themselves, nor care for those  
That skillfull are in Postures, and Commands.  
Nor are they carefull which end furthest goes.  
They think, to dice, to drab, to sweare, and swill,  
Is skill enough for them, learne more that will.

And if that any man more forward be,  
For to instruct the Souldier (as is fit)  
With such a fellow they cannot agree,

Front before the interchange.



Reere.

He is vaine-glourious, strives to shew his wit;  
They will be sure to quarrell and deprave him,  
And in their cups perhaps they'l —

Such honest hearts as find both meane and time,  
To practise others for their Countreys good;  
Why should this good be counted for a crime,  
To those that for their Prince would spend their blood?  
That Countrey sure will best be kept from harmes,  
Whose Subjects pleasure take to practise Armes.

But on this Subject I'l no longer bide,  
Of Countermarches here I'l take my leave,  
To shew the Wheelings next I shall provide.  
Which followes next of course, as I conceive.  
And though with Verse my Countermarches close,  
Beginning Wheelings, I returne to Prose.

## CHAP. I.VII.

Of Wheelings, their kinds and uses, with their severall words of Command.

The next Branch springing from this *Military roote*, is *Wheelings*; which are of two kinds, viz. *Wheelings angular*, and *Wheelings on the Center*: also be pleased to take notice, that all

Most of the  
divisionall  
wheelings  
are dou-  
blings.

of them are, either *intire* or *divisionall*: the use of *intire Wheelings* is to turne the aspect of the front proper to the right, to the left, or reere; either for the gaining of the Wind, Sunne, or some such like advantage; or to confront the enemy with their best Souldiers. Most of the *divisionall Wheelings*, being indeed more properly *doublings*, either extending the length or depth of the Battell: notwithstanding, because I would not be taxed with innovation, or alteration; I have, according to the usuall received way, placed them amongst the *Wheelings*; and now I will shew their words of Command or Direction. But before I enter upon them, give me leave to lay downe an observation or two, for the better instruction of the Souldiers in their *Wheelings*. The first is, That

Note that the before you enter upon your *Wheelings*, you close both ranks and files to their Order, which is three foot distance for both in rank and file: The other, that upon all *Wheelings* you must be sure to observe your leader, and wheelings follow him, keeping your due distance; your Muskettiers being all either payzed, or shouldered, your Pikes ought to be advanced.

between rank and file. Note that upon the exercise of six motions whether it be distance, facing, doublings, countermarches, or wheelings, the Muskettiers ought to be all upon one and the same posture either poized or shouldered; the Pikes in like manner either shouldered or advanced.

The words of Command are as followeth.

Wheele your	Right —	Wheele your	Right —	} on the same ground.
Battell to the	Left	Battell to the	Left	
	Right } about		Right } about	
	Left		Left	
Wheele	Off your Front by Division.	Wheele	Your flanks } Front	} into the } Reere
	Your Front inward to the Reere.		Both flanks into the Front and Reere.	
	Front and Reere } Right } flank		Your Front and Reere into both flanks.	
	into the } Left			

Each fol-  
lowing whee-  
ling redu-  
ces the  
former.

Observe that the first foure wheelings are *angular*, the next foure are wheelings on the Center, or more properly, on the midit of the Front. But all the first eight be *intire*, the latter eight are all *divisionall*. You may also observe, that every following wheeling, is a *reducement* unto that which is placed next before it, and the wheeling next before may reduce that next following: as to wheel your flanks into the front; if you wheel your flanks into the reere, it is reduced; or to wheel Front and Reere into both flanks, if you wheel both flanks into the front and reere, they are likewise reduced, as before.

For the last eight wheelings, which are *divisionall*, I will pricke for each of them his Figure. As for the first eight, which are *intire*. I conceive them so easie to be understood, that I may spare the labour; yet I will endeavour to expresse them as well as I can in words: and first I will begin with the wheelings *angular*, and then with the rest, according to their places: and therefore note, that when you are commanded to wheel to the Right, or Left, &c. and no other command added, it is to be understood an *angular wheeling*, and so to be performed.

## CHAP. LVIII.

### Of Wheelings Angular.

The Command is, Wheele your Battell to the right.

1.  
Observe the  
direction for  
angular  
wheelings.

This is an *angular wheeling*, which transfers the *Abell* or countenance of the Front proper, into that part which was the right flank: It also removes the Battell from the ground whereon formerly it stood, and placeth it on that part before the front, the hinge or Axis of the Motion is the right corner man, or right hand file leader, who with a small motion moveth to the right, every man, the more his place is remote from the right Angle, the more swift must be his motion, because his *arch-quadrant*, or *semi-circle* is larger in proportion, wherefore it must be the discretion of the Officers so to instruct their Souldiers, that when they wheel to any hand, they may so moderate their motion, that they on the contrary flank be not forced to run, but so orderly



orderly to containe themselves, that they may still preserve an orderly and even front. For the Reducement wheele your Battell to the left, in the like manner, as it was wheeled to the right; nevertheless, you must then note, that it will not bring you back into the same ground you formerly stood on; for it hath advanced you, the length of your Battall, before the place of your first front. But if you would be reduced into the same place, or plot you first stood on; then face your Battall to the right, and being so faced, wheele your Battell to the left, which being performed, face to the left, and then they are compleatly reduced, both for aspect and place. The next Command is, *Wheele your Battell to the right about.*

This is also an angular wheeling, and transfers the aspect of the front, proper, towards the rear: It is to be performed in the same manner as the wheeling to the right was, only the motion is twice so much: wherefore there ought to be the more care had, that so the motion may be orderly performed: for by so much as every man is neerer, or further off, from the right corner man, by so much the more swift or slow must he continue his motion, that so he may be sure to keep still, even in Rank with his Right hand man. This Motion being thus performed, your battell will be removed from its former station, taking in lieu thereof the ground Diagonally opposite to the right Angle.

\* To reduce these to their former Aspect, wheele your Battell to the left about, notwithstanding the ground you formerly did possesse, will be twice the length of your battell to the left, of your left flank; if you would reduce them, as well to their first ground, as their first aspect, face them to the right, and then wheele them to the left about, which being done, face them to the left, and they are perfectly reduced, as at first. But the neerest reducement of aspect and place is, if you wheele to the right about. Then wheele to the right about againe for reducement. If to the left about, then to the left about in like manner.

# CHAP. LIX.

## Of wheeling on the Center.

The Command is, *Wheele your Battell to the right on the same ground.*

This wheeling is by some called, a wheeling on the center, by others, a wheeling on the same ground. I cannot absolutely maintaine it to be either, for that it only wheels about the midst of the first rank. Neither may it rightly be termed a wheeling on the same ground, because it loseth  $\frac{1}{4}$  of the ground it formerly stood upon. This wheeling is quicker performed then the angular wheeling; and may be done in far lesse ground. For the left flank advanceth forward, still wheeling to the right, the right flank contrariwise, facing to the left; and so falling backward. If you have an odd File, then the middle file-leader must be the center or axis of the motion, if you have an even number of files, then the middlemost file-leader from the left. But if your wheeling be to the left, then the contrary. This by some is called the Prince of Oranges wheeling. For the reducement, wheele your Battell to the left, on the same ground: and they are reduced as at first. Our next Command is, to

*Wheele your Battell to the right about, on the same ground.*

This wheeling is also a wheeling on the Center, or midst of the front: and transfers the aspect of the front proper, towards the rear, removing the Battell from the ground whereon it formerly stood, and placing it on the ground before the former front. It is performed after the same manner, as the last: onely the motion is double so much as the other. In this motion, on the left flank, every man is to observe his right hand man, and the right flank must keep even after their left handmen, which become their leaders file-wise, untill they have attained their ground after which, they face as before, making an even front. For the reducement, wheele your Battell to the left about, upon the same ground, and they will be reduced as at first. I will next shew the divisionall wheelings, and intend to give to each of them his figure: whereby they may appeare the more easie to such as doe not yet rightly understand them. The first shall be a wheeling off by division: as in the next Chapter.

## CHAP. LX.

*Wheeling off the Battell by division.*

**T**His *wheeling off by division* in greater Bodies, may be usefull to meet severall enemies at one and the same time with the *Front of your Battalia*: and so consequently with your best *Souldiers*. By this *Motion* also the *Muskettiers* marching in *front*, may be *wheeled off by division*, to *flanke* their *Pikes*: But if you would *wheel off* your *Battell by division*, and againe *conjoyne* them (when the *file-leaders* are come to the *reere*) then it brings all your *Muskettiers* from the *flanks* to the *midst* of your *Battalia*: and the *Pikes* on the *outside* or *flanks*. If any question the *depth* of the *number* of this *Figure*, I have doubled *files* to make the *Figure* more perfect, as you may perceive by the following *Figures*.

The Command is,  
*Wheele off your Front by Division.*  
 First Front.



*Reere.*

*Note the direction, the wheeling is angular, the Motion to be wheeling about to the left, in the same manner; and then joyne or close their divisions. This being performed, wheeling about the outmost file leader on each flank.*

The way to performe this *Motion* is easie, for all the *file-leaders* of the *right flank*, *wheel about* to the *right*: the rest of each *file* following their *leaders*: the *File leaders* also of the *left flank*, *Motion to be wheeling about* to the *left*, in the same manner; and then *joyne* or *close* their *divisions*. This being done, if you would then *reduce* them, *wheele* them off againe by *Division*, after the same manner; and they will be as before. But if you would doe it some other way make use of this *Wheeling* next following: which will also bring them as they were. The word of *Command*, or *Direction* followeth, as in the next Chapter.

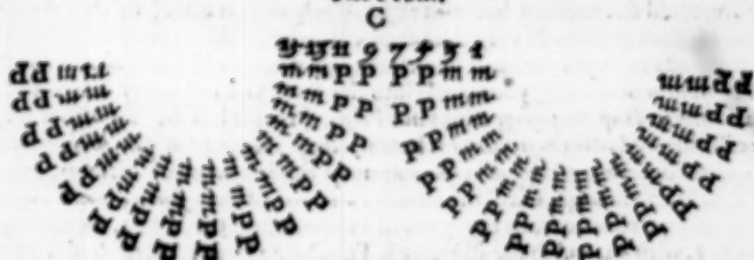
## CHAP. LXI.

*Of wheeling the Front inward towards the Reere.*

**VV** *Heeling your front inwards to the Reere*, is here placed as a *Reducement* unto the preceding *wheeling*: and brings the *Muskettiers* to the *flanks* againe. Neverthelesse if you would doe it, the *Company* being first *reduced*; then it brings the *Pikes* to be the *flankers*. Some have conceived that it may prove usefull at any time, when your *Reere* shall be too much overlaid by the enemies *Cavelerie*: having first gained some *hill side*, or other place of *advantage*, for then by this *wheeling* of your *front inward* to the *reere*, (which to the *enemy* will make shew of *disbanding*, or *fright*: But to the contrary) your *Battell* marcheth towards them, with a *settled* and *orderly* Body with all your *Muskettiers* in the *midst*. In that order *firing* upon the *enemy*: the *Pikes* being the *Flankers*: thereby defending the *flanks* of your *front* from the *fury* of the *Horse*. The *Figure* as in motion followeth.

The

The Command is, *Wheele your front inward to the Reere.*  
The Front.



*This is the Front.*

This Motion will hardly be well done, if your body hold too large an extension of length. But at what depth soever it is easie. The Motion is to be performed as followeth. The right hand file-leader, with all the leaders of the right flank advance forward, and so wheele about to the left: every file still keeping close to their right hand file. The left hand file leader, likewise, with all the leaders of the left flank, advance forward, and wheele about to the right: every file of the left flank closing close to the left. Thus the outmost files of each flank, will meet and become the innermost: the fronts falling perpendicularly to the reere. For the reduction of this figure, you may if you please, either wheele them off to the right and left by division: or else wheele your front inward againe to the reere. These two last wheelings have beene demonstrated with their files doubled whereby the figures might be the more perfect, but with men it would have beene needlesse: wherefore double ranks to the contrary hand, and they will be as at the first.

# CHAP. LXII.

*Of bringing the Flanks into the Front of the Battell.*  
The Command is, *Wheele your Flanks into the Front.*  
The Direction is, *Follow your Leaders.*  
Front.



Reere. { Flanks } into the { Front } { Flanks } into the { Middle }  
Wheele your { Wings } Front } Battell } Wheele your { Front } Reere } Center  
Front } Front } Flanks

This

This wheeling most properly a doubling.

Sixteen a breast allowing to each man 3. foote amounts to 48. foot.

The Reduction.

**T**His divisionall wheeling of the Flanks into the Front, is properly a doubling performed by wheeling. It brings all your Muskettiers from the flank into the front. So that whereas this body, before, could doe execution, but with eight Muskettiers, at once; by this Motion they may powre on 16. shot together. If they were deeper, before the Motion began; then it would bring the more hands to imployment. If upon some passe you should be chased in the Rere by Horse; by this Motion of wheeling your flank into the front, you not onely secure your Muskettiers, but also barricado up the passage with your Pikes; provided it be not above fifty foote over. Some call this a wheeling on the center; because they wheele about the middle-men of the front. But I rather conceive it an angular; because upon the first motion of dividing, every division wheeleth about his owne angle, untill the outmost file-leaders of each flank, meet together in the midst. You may perceive how, by the figures of number, where the figure 1. meets the number 16. 2. with 15. 3. with 14. and so for all the rest. Then being faced to their leader, every two files that meet, being now joyned, make one rank. There must be the like order and decorum kept, in the motion of wheeling each flank; as I shewed in the instruction of intire angular wheelings. For reduction of this Motion, wheele your flank into the Rere. Or else foure times the same, as I have seene some doe; although somewhat the further way about. Divers men are diversly opinionated; concerning the best word of Command or direction for this Motion. These I have knowne used which I have placed in the Margin, by the figure. And if any man like one better then the other, be it at his owne choice, either to use or refuse, while I passe to shew the next wheeling.

#### CHAP. LXIII.

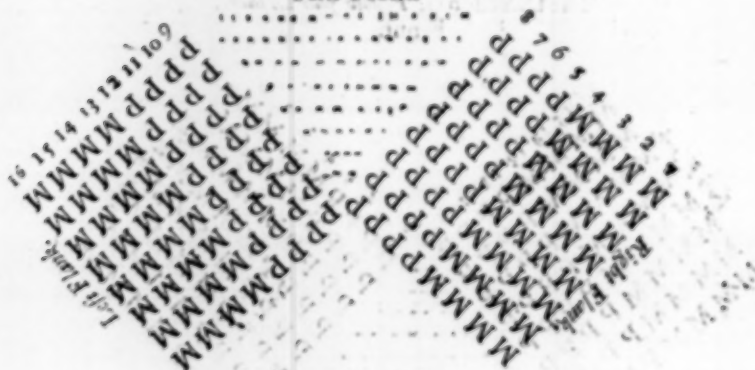
Of wheeling the Rere into the mid of the Battell.

The Command is, *Wheele your Flank into the Rere.*

The Direction is, *Face all about to the right, and follow your present leaders.*

Wheele your { Flanks } into the { Rere } { Rere } into the { Midst }  
                  { Wings } { Rere } { Rere } { Centre }  
                  { Rere } { Battell } { Front } { Flanks }

First Front.



Front Accidentall.

Upon all wheelings, you must observe to follow your Leader which must be understood as well of those which become Leaders accidentally; (by reason of farings) as of those which be the first and proper Leaders. As in this wheeling, for example: where the bringers up are become the leaders of the Motion.

**T**His divisionall wheeling of the Flank into the Rere, is also a doubling, and performed as the other. And whatsoever might be said in the behalfe of the wheeling of the Front, into the Rere, is also true of this. As in this wheeling, for example: where the bringers up are become the leaders of the Motion.

the

the *middest*; the same may be also spoken concerning the *wheeling* of the *Reere* into the *middest*. For this *wheeling* brings your two *outmost files* to be the first *Rank* to the *Reere*; the *bringers up* of the *right* and *left band files* meeting together: the *bringers up* of the *right Flanke* meeting face to face with the *bringers up* of the *left Flanke*. And so being faced to their leader, they which before were *compicat files*, are now become *halfe ranks*, either to the *right* or *left*. But you must note, that before you begin to *wheel*, you must face your body about to the *reere*: and then the *action* will be all one, as if you *wheeled* your *flanks* into the *front*. Wherefore I shall not need further to explaine it, having spoken fully to it in the precedent Chapter.

For the *reducement* of this *wheeling*, the *Commander* being at his *front* *accidental*, may command them to *wheel* their *wings* into the *reere*; and so passe through to that part where his *proper file-leaders* are; and then face them to him, and they are *reduced*. Or else, when he hath past through to the *reere*, and faced his *Company* to him; then his *Pikes* being *formost*, let him *wheel* his *flanks* into the *front*: when being faced to their leader, they are *reduced*: For this *motion*, there are also *divers* and *severall words of command*. And because it may be that some will better approve of some of the other words of *Command*, then of this that I have made use of: therefore I have placed others in the *margin*; that so any that will, may take their choyce, while I passe to shew the next *Wheeling*. Whose word of *Command* and *direction* you shall finde over the *figure* of the next Chapter.

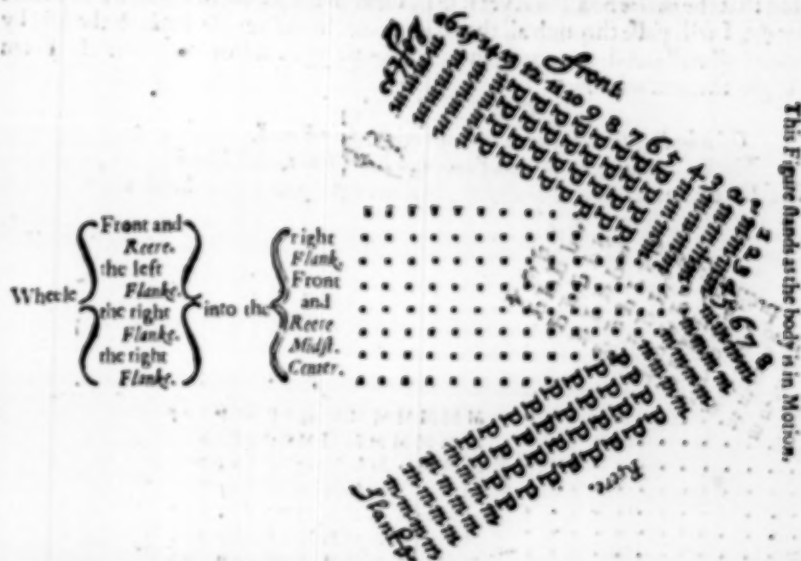
Note that the two middle-most bringers up are the bringers of this wheeling.

# CHAP. LXIV.

Of wheeling the right flanke into the midst of the Battell.

The Command is, *Wheele front and reere into the right flanke.*

The Direction is, *Face all to the right.*



**T**HIS division of wheeling of the front and reere into the right flanke, doth quadruple the depth; Note that if as may appear by this figure; which before the Motion began, contained but 8. in depth: the length be double the number of your depth, as in this figure; then this wheeling of front and reere into the right or left flanke, doth quadruple the former depth. If the number were equall in length and depth, then by this wheeling they would be but doubled. If the number of your length exceed more, then double your depth, by so much the more will the extension of the depth be beyond quadruple, &c.



But this *wheeling* being perfected, makes them 32. namely, if you direct the *aspect* of the *body* either to the *right* or *left*, after the *Motion* is ended. If you observe this *wheeling*, it doth divide the *Muskettiers*, on the *left* flank; the one half of them *wheeling* to the *front*, the other half to the *reere*: all the *Muskettiers* of the *right* flank, *wheeling* together into the *midst*. The *Pikes* are likewise divided; those that were the *front* half-file are in the *middest* of the *front* division of *Muskettiers*, and those which were the *reere* division of *Pikes* are in the *middest* of the *reere* division of *Muskettiers*. This *wheeling* may be to singular good use for the making of some *formes* of *battell*. But I forbear now to treat concerning *figures* and *formes* of *battell*, reserving them to be spoken of in their due places; and come now to shew the way how to performe the *Motion*. The *Command* therefore being given, to *wheel* *front* and *reere* into the *right* flank; then the first thing the *Souldiers* are to doe, is to *face* to the *right*. That done, they *wheel* together about the 4. and 5. men in the *right* band file, which is the *half* file leader to the *front*, and *half* file leader to the *reere*. You may easily perceive how by the *figure*, where the *reere* division *wheel*eth to the *left*, and the *front* division to the *right*: untill the *bringer* up of the *right* band file meets in the *midst* with his *file*-leader: the 2. with the 7. the 3. with the *sixth*, the *fourth* with the *fifth*, &c.

For the *reducement* of this *figure* of *Wheeling*, there are many ways, according as the *body* may be *fac'd*. But first conceive them *fac'd* the same way as they were before this *motion* began. And then the *wheeling* of *front* and *reere* into the *left* flank will *reduce* them, when they are *fac'd* to their leader. Or if you will, *face* them that way which they *wheel*ed in the *motion*; which was to the *right*: then *wheel* your *flanks* into the *reere*, when being *fac'd* to their *proper* *front*, they are reduced. And so, in like manner, should you *face* them to some other part; they might be otherwise reduced. The next *wheeling* will be the same to the *left*, as this is to the *right*: where, notwithstanding that the *motion* be all one, yet it shall differ in the placing of the men. For before I begin the *wheeling*, I will passe through all the *Muskettiers*, from the *right* flank to the *left*: by which meanes the *body* will stand, as appeareth by the *square* *figure* following under *A*. From whence I will begin the next *wheeling*.

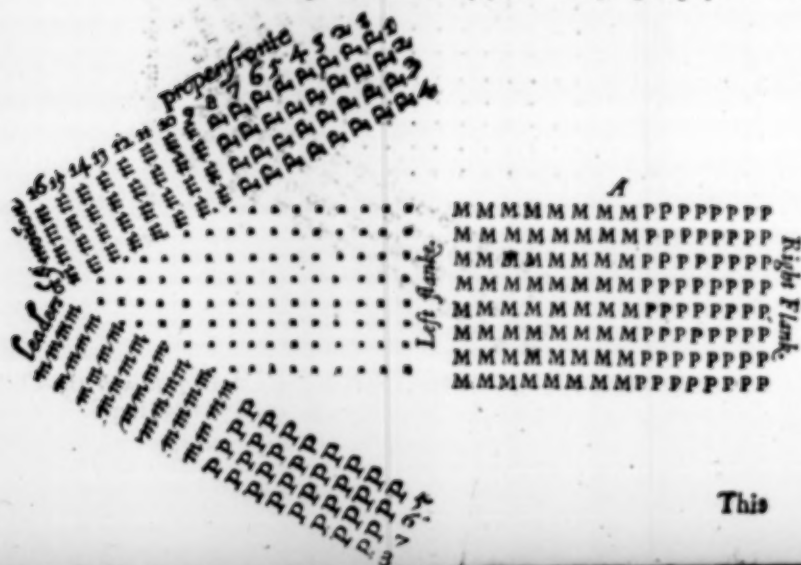
*Wheelings* may be diversly reduced: at the discretion of the Commander.

## CHAP. LXV.

Of *wheeling* the *left* Flank into the *midst* of the *Battell*.

The *Command* is, *Wheel* *Front* and *Reere* into the *left* Flank.

The *Direction* is, *Face* all to the *Left*, and move after your *present* Leaders.



This

**T**His divisionall wheeling of the *Front* and *Reere* into the *left flanke* is, in like manner, a doubling of the depth. For the nature of the *Motion*, it is altogether like unto the wheeling next before: differing onely in the *flanke*, and after that the body is faced to the *left*, the wheeling is to be performed, as wheeling the *flanke* into the *front*. But by reason that before the *Motion* began, all the *Pikes* were on the *right flanke*, by this wheeling they are brought to the *front* and *reere*. For the *Aspect* being directed the same way it was before the *Command* was given, the depth will be 32. as in the other *Figure*.

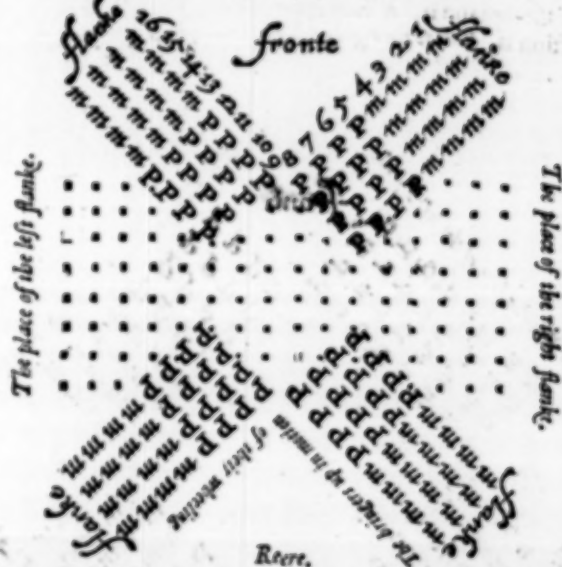
For *Reduction*, the ordinary way is to wheel the *front* and *reere* into the *right flanke*. Or if *Reduction* upon any occasion you have faced your body to the same way they have wheeled (which was to the *left flanke*) and would give your *command* from thence, then let them wheel their *flanke* into the *reere*. This done, the *Commander* passing to his first *front*, and facing them to him, they are as before this last wheeling began. Then caule the *four* files of *Muskettiers*, to face to the *right*: and to passe through to their places. Lastly, doe but close them to their due *distance* in *rank* and *file*: and they are perfectly reduced.

CHAP. LXVI.

Of wheeling *Front* and *Reere*, into the midst of the *Battle*.

The *Command* is. *Wheele both Flanks into the Front and Reere.*

The *Direction* is, *Halfe-files, face about to the Reere.*



**T**His divisionall wheeling of both *flanks* into the *front* and *reere*, doth double the depth: making them from 8. deep, 16. It doth likewise transerre the *Muskettiers*, from the *flanks* into the *front* and *reere*: making a division betweene the *Front halfe files*, and *reere halfe files*. So that of one body, *flanke* with *Muskettiers*, it maketh two, each having their *Muskettiers* in *Front*.

This figure (and most others as well *facings*, *doublings*, *countermarches* and *wheelings*) are here set forth as the *motion* of each presents it self in the execution, few of them being shewn, as they be when they are executed. And I conceive it the better way, not onely for direction, but also for the apprehension of the *Learner*, to shew the worke as it is in doing, rather then absolutely performe it.

The direction  
is to this  
wheeling.

For the way how to performe this wheeling, take these directions following. The Command being first given, as aforesaid, the first thing the Souldiers have to doe, is for the *halse files* to face about, and then the *front halse-files*, and *reere halse-files* wheele at one and the same time: the *front division* wheeling about their two *innermost file-leaders*, which are figured with the numbers of 8. and 9. untill the *file leaders* of the *right flank* meet together in the midst, with the *file-leaders* of the *left flank*: as you may easily perceive by the figure shewing the motion; the rest of their divisions, orderly following them. The *halse files* also being faced about, the *bringers up* in like manner, wheele together: being now the *leaders* of the motion, in the *reere*, as you may perceive. This being done, if you please, you may face them all to their leader, (whom suppose to be at the place of his first front) and then command them to close their divisions: which being performed, all your *file leaders* are in the two *innermost files* of the *front-division*, *file-wise*, and all the *bringers up* in the *reere division* of the same files.

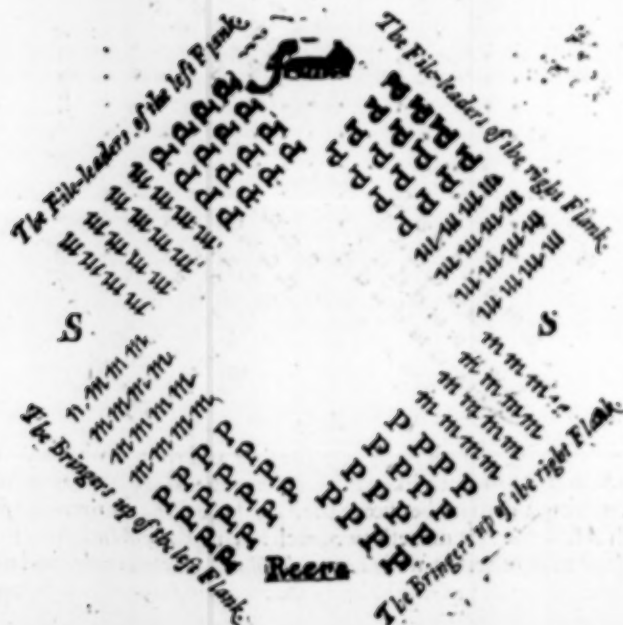
For the reduction of this wheeling, if you will, face them to either of the *flanks*, and command them to wheele both *flanks* into the *front* and *reere*, then face them againe to their proper *front*, and close their divisions, they will be as at first. But if you would make use of some other wheeling, to reduce it, then take this in the following Chapter.

#### CHAP. LXVII.

Of wheeling the flanks into the midst of the Battell.

The Command is, *Wheele front and reere into both flanks.*

The Direction is, *Face to the right and left, and wheele after your present leaders.*



**T**His divisionall wheeling of the front and reere into both flanks, may also be termed a doubling of the depth: by reason that from 8. deepe, it maketh double the former number. By this motion also, the Musketeers which were before flankers, are now transferred into the midst, betweene the front and reere of the Pikes. And whereas in the other figure, the wheeling was about the two middlemost file-leaders, and bringers up, this wheeling contrariwise, is about the two halfe file-leaders, of the outmost files on each flank. In the other wheeling, the file-leaders and bringers up, made the innermost files, in this the outmost file of each flank, as you may easily perceive by the figure. This motion being performed, leaves a large Intervalle (or division) from front to reere, betweene the flanks: if the Commander passe into the midst, betweene each division, and face them all to him; causing them to close their divisions, and march forth into his first place, (directing their aspects the same way) then will the Pikes be in the front and reere.

For the reduction of this Figure (of wheeling) to its former posture, you may face the body to one of the flanks. Which being done, command them againe to wheele front and reere into both flanks, when being faced to their former front, and having closed their division, they are reduced. Nevertheless if you would make use of some wheeling to reduce them, then wheele both flanks into the front and reere, and they will be as at first, after that they have faced to the Leader, and closed their divisions. Thus as briefly, and as plainly as I could, have I run through the severall motions and grounds, for the disciplining of a foot company. And although I neither can, nor hope to give satisfaction to all; yet I shall intreat the better qualified, that where I am wanting, there they will supply my defects with their goodnesse. Or if it so happen, that I undergoe the censure of needlesse superfluity: I would have such to make use of so much of it, as they shall thinke fit for their owne turnes, and leave the residue unto such as may have opportunity for to use it.

**T**hus Courteson Reader have I past the grounds,  
And variouse motions of the Infantery,  
Where thou must gaine the skill, cost others wounds;  
Though from a young one of th' Artillery,  
Read and consider, if thou nothing gaine,  
I make as little from thee for my paine.

If thou the distances dost well peruse,  
The severall Pacings, and the Doublings too,  
The Countermarches which of course ensue,  
And then our Wheelings which we lastly doe  
These being prattis'd, lea'nd, and understood,  
The benefit turnes to thy Countries good.

These like the vowels, are in number five,  
With which we spell all words that can be nam'd:  
So wish these motions we all formes contrive,

And from these grounds are all our Figures fram'd.  
Then frame thou no excuse, but learne to know them,  
And with as free an heart as I doe show them.

Now next of all I should some Fringes shew,  
But lest perhaps I hold you over long,  
I thinke it fit some respite to bestow,  
For feare our Souldiers thinke I doe them wrong,  
So please the Reader but to pause the whiles,  
And see our Leaders exercise their files.

For now each Leader is so courteson grown,  
He strives to bring another to his place,  
But they at modestly would keepe their owne,  
And each prefers his follower to the grace.  
So please you then but wink at the digression,  
And you shall see each Leader by succession.

## CHAP. LXVIII.

Of making men file-leaders successively, the files being eight deepe.

**E**VERY Man may be made file-leader of his owne file successively, according to his first standing, as well and easily in great Bodies, as by single files. Yea and with the same words of Command and Direction, as you may perceive by the following Table, where the Figures of number shew the succession of each mans leading. The words of Command which produce each leader, being placed in the Columes of the following Table. In the first Colume, the file stands each man in his right place, with his proper file leader in front. The rest of the files demonstrating the places of the men, according to their standing, upon the making of every severall file leader. The Commands are figured: which produce the like leaders.

The front of each file as they come to be file-leaders successively, with the numbers and places of the men, figured according to their proper places they first stood in.

8	7	6	5	4	3	2	1
7	8	5	6	3	4	1	2
6	5	8	7	2	1	4	3
5	6	7	8	1	2	3	4
4	3	2	1	8	7	6	5
3	4	1	2	7	8	5	6
2	1	4	3	6	5	8	7
1	2	3	4	5	6	7	8

The severall words of Command, which produce each File-leader.

Rank's } to the Right double } makes the File-leader, and half file leader stand; the rest passe through to the right and place your selves before your leaders.	Rank's } to the Left double } makes the File-leader, and half file leader stand; the rest passe through to the left and place your selves before your leaders.	Rank's } to the Right double } makes the File-leader, and half file leader stand; the rest passe through to the right and place your selves before your leaders.	Rank's } to the Left double } makes the File-leader, and half file leader stand; the rest passe through to the left and place your selves before your leaders.	Rank's } to the Right double } makes the File-leader, and half file leader stand; the rest passe through to the right and place your selves before your leaders.	Rank's } to the Left double } makes the File-leader, and half file leader stand; the rest passe through to the left and place your selves before your leaders.	Rank's } to the Right double } makes the File-leader, and half file leader stand; the rest passe through to the right and place your selves before your leaders.	Rank's } to the Left double } makes the File-leader, and half file leader stand; the rest passe through to the left and place your selves before your leaders.
1	2	3	4	5	6	7	8

The first are the proper leaders of the files. For to make the second leader, if there be but one File, then file ranks two to the right: if there be more files, then ranks to the right, double, and files to the right, double. By which means, the second man is become leader of his file; every man being disposed, as you may perceive by that file, whose leader is the figure of 2. To make him that was the third man, leader, let file leaders and half file leaders stand, and the rest passe through to the right, and place themselves before their leaders. Thus will the file stand like that, led by the figure of 2. For to make him that was the fourth man leader; Ranks to the left, double; and files to the left, double: whereby the file will stand like that, led by the figure of 4. For to make him that was the fifth man leader, let the first Rank stand, the rest passe through to the Right, and place themselves before their Leaders; by which means the file will stand like that, led by the figure of 5. For to make



make him that was the sixth man, leader, double your Ranks, to the left, and files to the left double: and then the file will stand like the file led by the figure of 6. For to make him that was the seventh man, leader of the file, counter-march front and reere into the middlest, and face them to the former front; whereby the file will stand like that, led by the figure of 7. For to make him that was the eighth man, leader the file: Ranks to the left double, and Files to the left double, and the file will stand like that, led by the figure of 8. For to reduce them, cause the first rank to stand; the rest *Reductions.* to advance forwards to the right, placing themselves before their leaders.

CHAP. LXIX.

Of making men file-leaders successively, the files being but sixe deepe.

Some will be inquisitive to know for what use the making of leaders by succession serveth; or whether it be not a meere Curiosity? To which I thus answer. That it is not onely pleasant, but profitable. Pleasant to the leader of a file, who having sufficiently exercised his file in postures, to give some time of respite, or delectation for the recreating of their (almost) tired spirits, brings each man, successively, to leade the file by proper words of command. And lastly, reduces each man to his former standing. It must needs be profitable, and much available in Discipline, when the skillfull Commander can thereby (with much ease) change and interchange: bring what rank he pleaseth to leade in front, and exchange them afterwards for others, yea, and lastly, at his owne pleasure, bring the proper file-leaders againe into their places. This following Table shoves each mans severall place, and how they stand upon every mans comming to be made file-leader, still suffering alteration, according to their various leaders, demonstrated here by the figures of Number (which are placed at the bottome of those Columnes, wherein are writ the words of Command) understand that those words over the figure of 2. are to make the second man file-leader. Those words over the figure of 3. make the third man leader. And so forwards to the rest, as in the Table.

The Front and standing of each File as they come to be Leaders.

6	5	4	3	2	1
5	6	5	2	1	2
4	3	1	6	4	3
3	4	6	1	3	4
2	1	2	5	6	5
1	2	3	4	5	6

The words of Command which produce each severall Leader.

File leaders Band, the rest pass shew, and place your selves before your leaders.	Ranks } to the right double	Ranks to the left double, and files double your depth to the left.	File leaders stand, the rest pass shew to the right, and place your selves before their leaders	Half files double your front to the right, and files to the right double.	Ranks } to the left double.
1	6	5	4	3	2

The

The first man is the leader of the file. For to make the second man leader, Command, *file, rank, two to the left*. If there be more files then one, *rank, two to the left, double, and files to the left, double*, which makes the second man leader: every man in the file being disposed, as you may perceive by that file, led by the figure of 2. For to make him that was the third man leader command *half file double the front to the right, and files to the right, double*; by which means the file will stand like that, led by the figure of 3. For to make him that was the fourth man leader; *face to the Reere*, and then he leads. But if you will keep the same front, command *the first rank to stand, the rest to passe through to the left, placing your selves before your leaders*. Thus will the file stand like that, led by the figure of 4. For to make the fifth man leader, command, *rank to the right, double*: and *files to double their depth to the right intire*: by which means the file will stand like that, led by the figure of 5. For to make the sixth man file-leader, *cause rank to the left, double, and files to the left, double*; and then the file will stand like that, led by the figure of 6. For to reduce them, there needs no more but *face to the reere*: notwithstanding, if you would have the front the same way, the Command is, *first rank stand, the rest passe forwards to the right, placing your selves before your leaders*.

*Reduction*

For to make sixe men successively Leaders, by sixe words of Command, besides Facing.

The first is leader: for the second file, *Rank two to the left, and files to the left, double*. For the third, *Countermarch front and reere into the midst, and face to that part which was the reere*. For the fourth, *face about to the right*. For the fifth, *Countermarch front and reere into the midst, and face to that which was the reere*. For the sixth, *file, rank two to the right, and files to the right, double, face them about, and they are reduced*.

## CHAP. LXX.

Of making men file-leaders successively, according to their precedence and dignity in file.

\* What fortunate profits Souldiers have made by following this Art, read Rawleighs Hist. of the world, l. 5. c. 6. Sect. 2.

HAVING already demonstrated two Tables, for the making of men file-leaders successively: Let it not be held impertinent if I present two others unto you, wherein I shall deliver the way of making men file-leaders, according to dignity. Snarling Cynicks, I know, will carpe at my curiosity, but studious Souldiers will praise my industry. Men naturally are not inclined to practise any thing, wherein they find not either profit or delight: few men by the practise of *Armes*, makes \* profit. If then the *aim* of honour may be first attracted, with the various delights which are found in the study and practise of the Art *Military*, Why should any grutch the gilt to the wholsom Pil (which makes it the more readily and willingly received?) Or why should any hinder the meanes, whereby Souldiers may be built up with delight; Seeing that the benefit redounds to the reputation and honour of our Country? Thus much upon mine owne knowledge. I have seene some so preposterous to all conceit of Souldiery, that they have shunned it with as much care, as chasty husbands doe beggery. Yet casually happening, to see the exercise of a single file, have been so taken with some conceit or knack, that without any further aime, they have taken *Armes*: Wherin by their practise and industry, they have attained so much proficiency, that now they are knowne excellent in many parts of the Art *Military*. Nor hath their flowing buds bene any way priviledged, or might escape those private and frosty nips from asperionating tongues, a fault too common and customary in many, to despise the vertue of those, whom they have knowne raw novices in that Art and faculty, wherein themselves have bene noted any thing extraordinary. But lest I be censured to be over tart or tedious, I returne to the worke of this Chapter: which is the making men file-leaders in dignity.

Each mans dignity and worth, with the reasons thereof, are at large set forth in the fourth and fifth Chapters of this Booke. The Table followeth, wherein is declared every mans dignity, and the words to make them file-leaders accordingly, &c.

## File-leaders by Dignitie.

The proper file leader.	The Bringer up.	The halfe file leader.	The bringer up of the front halfe file.	The second man from the front.	The second man from the rear.	The man after the halfe file leader.	The third man from the front.
8	1	7	1	6	1	5	1
4	1	3	1	2	1	6	1
3	1	6	1	7	1	2	1
1	1	8	1	5	1	4	1
2	1	4	1	1	1	3	1
5	1	1	1	4	1	8	1
6	1	5	1	8	1	7	1

The severall words of Command, which produce each File-Leader.

0	8	7	6	5	4	3	2
---	---	---	---	---	---	---	---

The words of Command, to reduce them to their former places are placed beneath this Table.	Halfe files double your front to the left, then file to the left double.	File leaders, and halfe file leaders stand the rest pass before to the right, placing your selves before your leaders.	Front and Rear halfe files interchange your ground.	Bringers up double your front to the right, and files to right double.	File leaders stand; the rest pass before to the right, and place your selves before your leaders.	File leaders, and halfe file leaders stand; the rest pass before to the left, and place your selves before your leaders.	Bringers up double your front to the right, and files to right double.	Front and Rear halfe files interchange your ground.	Bringers up double your front to the right, and files to right double.	File leaders stand; the rest pass before to the right, and place your selves before your leaders.	File leaders, and halfe file leaders stand; the rest pass before to the left, and place your selves before your leaders.
--	--	--	---	--	---	--	--	---	--	---	--

## The Reduction.

1. Front and Rear halfe files interchange ground.
2. Bringers up to the right double.
3. Bringers up face about to the left, and march into your places.

## CHAP. LXXI.

Of making men file-leaders by dignitie, the files being but sixe deepe.

Many wayes there bee, to make men file-leaders, either successively, or by dignitie in one single file; which cannot so easily (nor so properly) be performed with a whole compaignie (or larger body) and therefore neither proper nor usefull. Such wayes only being fit to be practised, as will suite with any number, the depth onely reserved, which I have here undertaken for sixe deepe. The following TABLE demonstrates their Number of Dignitie;

The file-leader is the A. chiefest man in dignity and first leader of the file. To make the B. second man in dignity file leader, (command) file-leaders stand; the rest pass through to the right, and place your selves before your leaders. To make the C. Third man in dignity file-leader, (command) file-leaders & halfe file-leaders, stand; the rest pass forwards to the left and place your selves before your Leaders. To make the D. fourth man in dignity file-leader, (command) bringers up double your front to the left, and (that being done) files to the left, double. To make the E. Fifth man in dignity file leader, (command) front and rear halfe files interchange ground; and then, face as before. To make the F. Six: man in dignity file-leader, (command) file rank two to the left, (if it be a single file: but if you have more files, then command ranks to the left double) and files double your depth to the left. To make the G. Seventh man in dignity file-leader, (command) file-leaders, and halfe-file-leaders stand; the rest pass forwards to the right, placing your selves before your leaders. To make the H. Eighth and last man in dignity file-leader, (command) halfe-files double your front to the left. (That done) Files to the left, double. This being performed, every man hath successively bin the leader of his own file: according to his dignitie therein. The reduction is placed at the lower end of the table

1. The file leader.

2. The bringer up.

3. The halfe file leader.

4. The bringer up of the front halfe file.

5. The second man from the front.

6. The next before the bringer up.

7. Next after the halfe file leader.

8. The third man from the front.

uity; and the succession of each man coming to leads in front; as also each mans place upon the alteration of every leader, and severall Word of command. Beneath each Column is placed the Words of command, to produce the next insuing leader. Last of all is the reduction.

A. The file-leaders.  
B. Bringers up.

C. Half-file-leaders.  
D. Bringers up of the front half-file.

E. The second man from the front.

F. The second rank from the rear.

Upon the first summons of the Drum, every file-leader is to draw forth his file (whether he be exercising them in posture or motion) to repaire to his rendezvous or colour.

\* Distance in rank and file is to be understood to mean one rank & file and not as some would fondly mistake it.

\* That is to advance by key or the or leading staff.

### The Reduction.

Ranks to the left } double  
Files to the left }  
Half-files double your front to the Right.  
Bringers up face about to the Right, and march forth into your places.

### Succession of leading in Dignitie.

6	1	5	1	4	1	3	1	2	1	1
2	1	4	1	5	1	6	1	6	1	5
1	1	3	1	1	1	2	1	3	1	4
3	1	1	1	3	1	4	1	1	1	3
4	1	2	1	6	1	5	1	5	1	6
5	1	6	1	2	1	1	1	4	1	2

### The words of Command which produce each File-Leader.

1	2	3	4	5	6
Bringers up double your front to the right; Files double your depth to the right.	File-leaders and half file-leaders stand; the rest pass throug to the left, and place your selves before your leaders.	Front and Rear half files interchange ground.	Ranks to the right double; and Files to the right double.	File-leaders stand; the rest pass throug to the left, and place your selves before, &c.	The words of command to reduce them are at the side of this Table.

Although the Table, it selfe were sufficient to instruct the desirous; yet for the clearer demonstration, take these further instructions.

A. The first rank, or the file-leaders of each file are the first and chiefest men in dignitie; every one in his own file. To make the B. second rank in dignitie, file-leaders, (Command) bringers up double your front to the right; (and then) files double your depth to the right. To make the C. Third rank in dignitie file-leaders, (command) file-leaders, and half-file-leaders stand; the rest pass throug to the left, and place your selves before your leaders. To make the D. Fourth rank in dignitie file-leaders (command) front and rear half-files interchange ground. To make the E. Fifth rank in dignitie file-leaders, (command) ranks to the right double; (and) files to the right double. To make the F. Sixth and last rank in dignitie file-leaders, (command) file leaders stand; the rest pass throug to the left, and place your selves before your leaders. The Reduction is placed at the side of the Table.

### CHAP. LXXII.

Of drawing the Files againe into a body, and preparing them for skirmish.

BY this time (me thinks) I heare the Drums beat a Call; which summons each File Leader to his place: every man observing his order, both in rank and file. The Officers having taken their due places: the Capitaine and Ensigne in the Front of Pikes; the Lieutenants in the reere; the Sergeants on the flanks; the Drums on the front and reere Angles of the Pikes: as you may perceive by the square figure following.

Now the Drummes beat a March, the Ensigne flying at the head of the Pikes; the Pikes and Muskets shouldred, marching at their distance of order \* in file, at open order in Rank; presently by a \* signe from the Capitaine, the Drums beat a preparative: the Pikes advance, the Ranks close forwards to their order; the Muskettiers make ready, and every man prepares himselfe for Battell or Skirmish. And here the eyes of the Drum must bee very vigilant to observe his Capitaine or Commander; that by the least signe, either of his hand, leading-staffe, or whatsoever else hee carries, hee may either continue his charge, retreat, or else charge home: and every

Souldier

*Souldier* ought to be so well trained and practised, that in the time of *Battell*, hee may receive ample instructions from the sound of the *Drum*.

If the *Captaine* sends out loose *Files*, or *rankes* to skirmish before the front, the *Ensigne* continues standing at the head of the *Pikes*, his *Colours* flying. If the *Captaine* prepare to give fire, either even with the front of *Pikes*, or in the single borne *Battell*: then the *Ensigne* to furl up his *Colours*, and retire to the *Half-files*. The body draws into a square, with the *Officers* in their places.

Front.

E C

S M M M M D P P P P P P P D M M M M S  
 M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 S M M M M D P P P P P P P D M M M M S

L

Rear.

Thus many *Officers* may serve for a larger *Company*, if the *Souldiers* be expert and skilfull: and to the contrary, they are all too few, if they be raw and unexperienced. I have seene some *Companies* which have bin so absolutely ignorant, that each man would have needed an *Officer* to have kept him orderly in his place. Nevertheless, I make no doubt, but that by the careful oversight of the *Lord Lieutenant*, the good assistance of their *Deputies*, and the diligence of the *Captains*, and their *Officers*, this fault will quickly be amended. And this might easily enough be done; if that those which are owners of *Armes*, would meet one houre or two in a fortnight (at their best leisures) and first practise the postures of the *Pike* and *Musket*, not omitting to exercise the *Movements* and *Firings*, when they are growne more expert. If any shall object, that however this may be done in *Townes* and *Cities*, yet it cannot be in the *Country Villages*. I answer, that if they meete not above foure, six, or eight in a place, although they have no *Officer* to instruct them, yet by conferring and trying, and often practising, they will begin to carry their *Armes* with more ease; and to use them with more delight. Neither need they be altogether ignorant, seeing there are diverse printed *portraictures* of the postures of each *Armes*; as also *books* whereby they may have very ample instruction. By which having attained some little skill, they will not be contented untill they have better improved it by the instruction of their *Officers*: after which they will prove better *proficients* in one houre, then as they were before in a year.

## CHAP. LXXIII.

Of Firing by fullorne File, three severall wayes

Before I enter upon *formes* and *figures* of *Battell*, be pleased to observe with me, that all *firings* are either *direct* or *oblique*: notwithstanding that the *formes* are full enough of *varieties*, occasioned (most times) by the situation of the place; the order of the *enemy*, and the number of *men*: with other *Politick observations* for the gaining of *wind* and *sun*. For the manner of *firings*, they are sometimes advancing against an *enemy*, sometimes receiving the *enemies charge* upon a *stand*; or else retreating. Otherwhile, we give fire in the *Rear*, marching from the *enemy*: or in *Flank*, marching by an *enemy*: and it may so fall out, that the *enemy* may charge in several places at once; as in *Front* and *Rear*; or in *Front*, *Rear*, and *Flank*; of which particular,



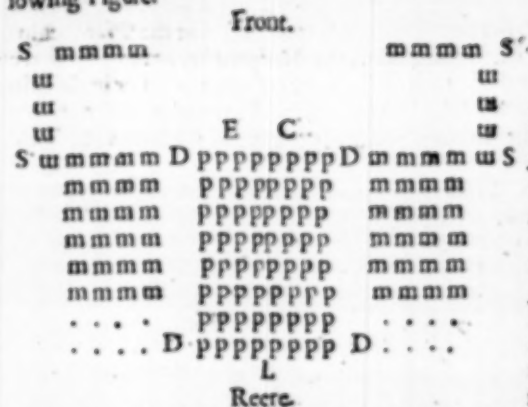


voke the *Enemy* to *battle*, to draw them into some *Ambushment* and other such political ends: the *number* of men which *march* forth upon such *designes*, nor the *manner*, are not alwayes certain, but consist sometimes of more, sometimes of fewer, according to the *number*, *time*, and *place*. If the *Commander* please, the *outermost* file on each *flanke* may when they *move* forwards, and are come to their *ground* for *firing*; rank the one halfe of each *File* inward into the *front*: the rest being led by their halfe *file-leaders*, move forwards to their *Order*, standing *file* wise after the *outermost* men (of the former *rank*) who are the *file-leaders*; having fired they are to *wheel* off; the others in the *interim*, ranking into their *places*; the next *outermost* *Files* to *march* forwards doing according to the former *directions* for the whole *Files*.

CHAP. LXXIV.

Of *Firings* by two *rankes*, ten paces adv. need before the *Front*: Next, even with the *Front*: And lastly, even with the last half-files,

Advancing of two *rankes* to fire, ten paces before the *Front*, is most commonly used, when one or both *Battails* march against each other; the *Musketeers* being led forth by two *rankes* together *tenne* or *twenty* paces, before the *front* of the *body*; that so they may come near enough to doe certaine *execution*. A *Serjeant* from each *flanke*, leading up the two *formost* *rankes*, (according as they shall have order) the first *rank* of each *flank* is to *present*, and give *fire*, *wheeling* either all off to the *right*, or to the *right* and *left*, as you may perceive by the following *Figure*.



*pannes* guarded. that so they may *level* and *fire* as soone as their *leaders* are clear of them, and *wheel* off, in like manner placing themselves as they were before. The next two *rankes* are to begin to *advance* forwards, when they see the last of the two former *rankes*, *presented*, ready to *fire*. And they also having *fired*, *wheel* off as the others did before them. And so, successively the rest of the *rankes* *advancing*, *firing* and *wheeling* off againe: placing themselves according to former *directions*. This way they may give *fire* once or *after* over, as the *enemy* doth *advance*, or the *Commander* shall see fitting. All this while that the *Musketeers* *advance* so far before the *Front*, (i. the *body* be upon *march*) the *Pikes* may be *shouldered* *fire*.

but when the *bodies* come within *eight score*, or lesse, (if there be any doubt of the *Enemies horse*) then it is fit that the *Muskettiers* give fire even with the front of the *Pikes*, and that the *Pike-men* advance their *Pike*, and close forwards to their distance of *three foot*, that so they may be even in *rankes* with their *Muskettiers*, as you may perceive by the following *Figure*. If there be no feare of the *enemies horse*, then the *Pikes* may move *shouldered*, and close forward to their *Order*; by that meanes saving their *Pikes* from being *shattered and broken* by the *bullets* that flie at *randome*.

Front.

E. C.

S m m m m D p p p p p p p p D m m m m S  
 w m m m m p p p p p p p p m m m m w  
 w m m m m p p p p p p p p m m m m w  
 w m m m m p p p p p p p p m m m m w  
 m m m m p p p p p p p p m m m m  
 m m m m p p p p p p p p m m m m  
 S . . . . D p p p p p p p p D . . . . S

L

Reere

*rankes* of *Muskettiers* having *fired*, and *wheeled* away, the next *rankes* are to *move* forwards at three \* *motions*, into their places, and there to *give fire* after the same manner; *wheeling* away againe, and placing themselves according to former *directions*, every *rankes* still making good their *Leaders ground*. In this sort the *Battell* may be continued, untill they have fired once, twice, or oftner over; and that the *Bodies* be come so close together, that the *Pikes* begin to *port*, and so at length come to *push of Pike*. Which done, the *Muskettiers* are to *give fire*, either *retreating*, or else not to *advance* further, then the *halfe files* of *Pikes*. For in that place (the *bodies* being come so neere together) they will doe as much *execution*, as if they were even with the *front*. The manner of the *standing*, you may perceive by the following *figure*.

Front.

E. C.

D p p p p p p p p D  
 P p p p p p p p  
 P p p p p p p p  
 P p p p p p p p  
 P p p p p p p p  
 P p p p p p p p  
 P p p p p p p p  
 P p p p p p p p  
 D p p p p p p p p D

L

Reere.

m m m m S  
 m m m m w  
 m m m m w  
 m m m m w  
 m m m m w  
 m m m m  
 m m m m  
 m m m m

S

\* The three  
 Motions are  
 blow your  
 coale open  
 your pan.  
 present  
 breik high  
 You are to  
 blow your  
 Coale, step-  
 ping for-  
 wards with  
 your left  
 foot: y  
 Open our  
 Fan, step-  
 ping for-  
 wards  
 with your  
 right foot,  
 present, step  
 ping for-  
 wards with  
 your left  
 foot, these  
 Motions are  
 to be per-  
 formed hand  
 and foot to-  
 gether, by  
 every one  
 that ad-  
 vance  
 each ground  
 to give fire,  
 without ex-  
 pecting any  
 directions  
 in time of  
 skirmish.  
 The *Pikes*  
 coming  
 to the *Port*  
 and charge:  
 the *Musket-  
 tiers* either  
 firing with-  
 out ad-  
 vanc-  
 ing into  
 their  
 Leaders  
 ground or  
 even with  
 the halfe  
 files.

The *Pikes* being now *charged* and ready to come to the *push*, the *Muskettiers* are to advance no further then the *Halfe files* of *pikes*: that (so they may do execution with their *sword* and be out

out of danger of *Pikes*. This having attained, they are there to *present*, and *give fire*; every rank still *moving forwards*, and maintaining his leaders *ground*. After they have performed their *firing*, they are to *wheele off* by *division*, as in the former figures: still placing themselves in the *Rearre* of their owne *files*, always taking their directions from the *Drum*, either for *charging* on, or *retreating*, &c.

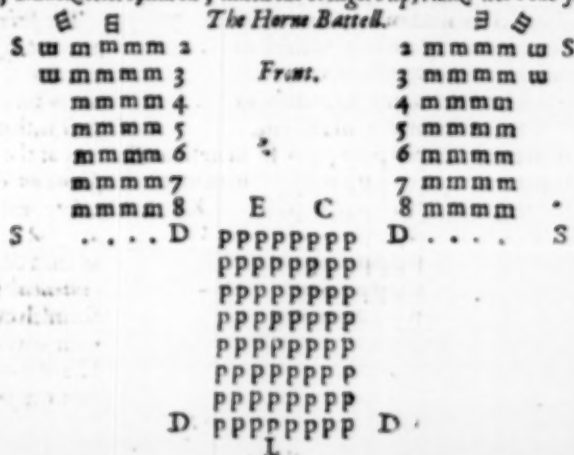
The *Battell* or charge being ended, the *Reductment* is easie. The leader of each *file*, being in his place at the *head* of his *file*, command the *Muskettiers* to *march up*, even with the *front* of *Pikes*, and then they will be as at first.

Observe withall that when the *firing* is to be performed, even with the *Front*, then the *Muskettiers* are still to make good their leaders *ground*: the want to be in the place of most securitie (which is the *Rearre*) as you may perceive by the *pricks*, which I have designed, for noting out the *empty roomes* of such, who have *closed forwards* to make good the *ground* in the *Front*: the others that last *fired*, are *wheeled off*, and *trooping downe* into their places. When the *firing* is even with the *half-files*, they are to doe the like, unless the *Drumme* beat a *retreat*; for then the *Muskettiers* neither *advance*, nor *retreat*: but every *Rank* giving *fire* on the same *ground* they *stand*: and then *wheele off* again, that their fellows may doe as much. \* Nevertheless when the *forlorne files* *march forth*, or that two ranks *march forth*, ten paces (or more) before the *front*: then they are to give *fire*, as upon a *retreat*: unless the *enemy* give *ground* or *flye*. I will now shew some other wayes of *firing in front* (before I shew the *firings* in the *reere*) The first whereof, shall be the *horne battell*: as in the Chapter following.

CHAP. LXXV. Of the *Horne battell* how to make it: and to reduce by *firing*.

The *Horne battell* may be for the same occasion and use, as the *firing*, by two ranks ten paces *advancing* before the *Front*; and is by some held more serviceable, because that the *Muskettiers* doe their *execution* more roundly without any intermission of time: and keepe themselves without stragling from their *bodies*. Besides, the *Wings* of *Muskettiers*, being so advanced, are more apt for *over-framing*, and more easily to be *wheeled*, whereby to charge the *emie* in *Flank*, each of these *Wings* or *divisions* are to be led up by a *Serjeant* (or some other *superiour Officer*) unto the place appointed by the *Chiefe*. But because it may be performed in time of *exercise*, by the intelligible *Souldier*, observe the *Command* which produceth this following Figure.

*Pikes stand; Muskettiers march; untill the bringers up, ranks with the front of Pikes.*



The

The firing  
desired.

Note.  
Reduction

The figure being perfect, the first Ranks of Musquetiers, present and give fire, wheeling off, either all to the right, or to the right and and left (according as they shall have direction) and placing themselves orderlie, in the Rere of their owne files. The next-ranks (after the same manner) firing and wheeling off, and placing themselves behind those, which were their leaders. Thus is every rank, successively, to doe the like: untill they have all given fire. If the Commander would still preserve, and continue the same Figure; then let the Musketiers still move forwards, into the ground (or place) of them that fired before them: and the forme will be the same. But if by the Chieftaine it be found necessarie, that after once or twice firing over, the Shot should flank their Pike, then the Musquetiers must not advance into their lead or round; but to the contrary, every rank is to present and fire on the same ground they stand, and that so soone as they are cleere of their Leaders. Or if need be, the Pike may advance and march up, to make their Front intire: which being done, the File leaders of Musquetiers being in front they are Reduced.

# CHAP. LXXVI.

Of the Demi-bearing Battell: The use of the figure, how to make it, and to reduce it by firing.

The danger  
of the De-  
mi bearing  
is fear of  
being over-  
powered.

The next firing in Front which I present unto you, is the Demi-bearing: which is a figure, firme, solid, and stable, yea and doth as much execution as any of the former, and that with halfe the danger. For the Pikes in the former figure, they either ranke even with the front of Muskets, or else the division of Musketiers being open, they become liable to the danger of the enemies shot: themselves not being able to doe any thing, either offensive or defensive. But, to the contrary, in this figure, they are securely covered by their owne Muskettiers: untill they approach neerer to the enemy. Whereby they may be able to doe some service; either by sending their shotes of arrows amongst them, thereby breaking their order and array, or else by closing neerer, come to the shock, and so try the fortune of the day. But not to hold you longer in circumstance, take the words of command: which produce the Figure, as followeth.

Pikes stand, Musketiers advance before your Front of Pikes, and close your Divisions.

The Demi bearing.

E Front. C

S u m m m m m m m m u S

u m m m m m m m m u

u m m m m m m m m u

u m m m m m m m m u

m m m m m m m m

S m m m m D p p p p p p p p B m m m m S

m m m m p p p p p p p p m m m m

p p p p p p p p

p p p p p p p p

p p p p p p p p

p p p p p p p p

p p p p p p p p

D p p p p p p p p D

L

\*The firing  
on this fi-  
gure.

The firings on this figure, may be divers; yet I shall content my selfe onely to shew two of them. \* The first is, that the Muskettiers may at the discretion of the Commander, give fire in front: and so wheele off by division (or all to the right, as shall best please him that commands in chiefe) placing themselves in the Rere of their owne Divisions and files of shot, which is just before the front of Pikes.

The



The next rank, then moving forwards into their leaders ground, are to present, fire, wheel off, and place themselves after the same manner: the rest of the Muskettiers doing the like, untill they have all given fire: which firing, doth nothing alter the form or figure of battell. Having fired once or twice over this way, the second firing shall serve for reduction: which is indeed the firing intended to be exprest by this figure. And that I may by words the more clearly explain the Work, take these directions following.

The second firing on this figure serves for the Reduction.

\* The first rank having given fire, are to wheel equally off by division: each part falling file-wise down, close by their flanks of Muskettiers: untill the leaders of the ranks of Muskets come down as low as the first rank of Pikes; which being performed, they are to face outwards, and to move so far forth in a strait line, untill they have ranked even with the first rank of Pikes. But herewithall are they to observe, that they must leave an interval between the innermost Muskets of each flank; and the outermost-file-leader of the Pikes. So soon as the first rank hath given fire and wheeled away, the second rank is to give fire, wheeling off, as before, and passing down between the Intervals on the flanks: placing themselves after their leaders. The same is every rank successively to do, untill all the Muskettiers are drawn from before the front, and placed on the flanks of their Pikes. But when there are not above two ranks of Muskettiers to give fire, then the Pikes may Port; and when the Muskettiers have fired, and are wheeled away, they may charge. And lastly, the Pikes being re-advanced, the body stands reduced, as at first.

\* Note this direction.

The Pikes Port and Charge.

CHAP. LXXVII.

Of giving fire, advancing by way of Introduction, with the beneficial use of the Bow and Pike.

I Shall next offer to your perusall a figure of Introduction: which is a passing thorough or between: Being a firing, advancing against the enemy, and gaining ground. I will not dispute how usefull it is; but sure I am, it is over-ballanced with danger. As for such whom I have seen to practise it, they have rather used it for variety, in a well experienced Company, then for any known excellencie it hath in it self. But if these lines happen to be over-lookt by any, that preserves a better opinion of this firing by introduction, then I do: I shall be willing to leave them to their own liking, while I in the mean time proceed to shew the manner of the execution, which is usually one of these two ways. The first, when the Motion is begun by the second Rank from the front. The other, when it is begun by the Bringers up. Neverthelesse you must note, that your files of Muskettiers must be opened to their open order; before the firing begin: that so the Muskettiers may passe between the Intervals of each file, to give fire in the front. And therefore take the words of Command and Direction; which will produce this Figure following.

Firing by introduction ordinarily performed, the first two manner of ways.

Muskettiers: make ready to give fire by introduction.

Files of Muskettiers, open by Division to your open Order.

SM	M	M	M					M	M	M	M	S				
MMMMMMMM				E	C	MMMMMMMM										
MMMMMMMM				D	P	P	P	P	P	P	P	D	MMMMMMMM			
MMMMMMMM				P	P	P	P	P	P	P	P	MMMMMMMM				
SM	M	M	M		P	P	P	P	P	P	P	M	M	M	M	S
				P	P	P	P	P	P	P	P					
				P	P	P	P	P	P	P	P					
				P	P	P	P	P	P	P	P					
				P	P	P	P	P	P	P	P					
				D	P	P	P	P	P	P	P	D				

L

M

This

*This direction  
on firing  
by introduction.  
If there be no  
direction given,  
they are  
to pass the  
row to the  
right.*

*\* The Pikes  
may be shouldered,  
and still be moving  
slowly  
forwards,  
and so keep  
even with  
the front of  
Musquetiers.  
\* A second  
way of firing  
by introduction.  
Red argument.  
The use of  
the Row and  
Pike.*

This firing by introduction may be thus performed. The Pikes being flankt with their Musquetiers, the first rank of each flank, *present and give fire*: having fired, they *stand* and *make ready* again in the same place. \* The second rank passing forwards before the first, do there *fire* and *stand*: the third rank then passing forwards after the second, and standing even in rank with them that first fired; that so soon as the second rank hath fired, they may quickly step before them, and *fire* in like manner. In this firing, still the rank which is next to fire, stands even in rank with them which last fired; untill those which *stand* and *presented* have likewise given fire: after which they then *pass* before them; the rank which was their next followers, passing forwards and ranking with those which last fired: every man following his Leader successively, untill the *Bringers up* give fire, and *stand*, and then the figure will become a *Horn battell*. All the while that this Firing by Introduction is continued, the Pikes may be \* shouldered (if there be no fear of Horse) or otherwise at discretion. If you continue this Firing twice over; the Musquetiers will have their *right places*: which being done, *march* up your Pikes, to rank even with your Musquetiers in front, and they are reduced. \* For the other way of Firing by Introduction, the first rank (or *File-leaders*) are to give fire as before, and to stand, the last rank (or *bringers up*) in the interim of their Firing, *marching up*, and *ranking even* with the second rank: the rest following their Bringers up, as they do when Bringers up double their front. The first rank having Fired the *bringers up* (i.e.) immediately before them; *present*, and *give fire*; the rest still, successively, doing the like, untill every rank have given fire once over. Observe withall that the *file-leaders* are to give fire twice over: being the first and the last: and then to *stand*, the Pikes *marching up*, even with their front of Musquetiers. And thus they are reduced as at first. The Pikemen, all the time of this Firing do no service: Notwithstanding, if one half of them had *bowes* fastened unto their Pikes (being able and well practised men) they might, whilst the Musquetiers are in Firing, be dealing of their doles about: and although their arrows did not happen to wound mortally, yet the whistling noise, the terrour of the sight, and the severall hurts (which could not chuse but be many) would be a great abatement to the stoutest courages. And great pite it is to see the lusty *Pikemen* poorly to drop down by the Musket shot, himself not being able to hurt his enemy at that distance, nor defend himself.

## CHAP. LXXVIII.

*The way to make the Diamond Battell: severall ways to Fire upon it: with divers other Figures and Firings, which are thereby produced.*

THE Diamond Battell is also a firing in Front; though more for shew, then modern service; yet because that some hold it in venerable respect, I thought fit to place it amongst the rest; leaving every man to his liking, either to use it, or refuse it. It may be that some will look that I should make the *Spear Battell*, the *Wedge*, the *Saw*, and many such like: which might be made either hollow or solid. But I shall intreat such to spare me, for I would not willingly spend time to so small purpose; chusing rather to insist on figures, more profitable for them, and commendable for me. Yet if any man have a minde to practise any of them, by observation of this *Diamond Battell*, he may easily make them. But not to hold you longer with circumstance, the words of Command, and Direction, which are for the making of this *Diamond Battell*, are as followeth.

*First, cause your Musquetiers of the right flank, to open to the right, to a sufficient distance, for receiving the Muskets of the left flank.*

*Then Command the Musquetiers of the left flank to pass thorough, into the space of ground on the right.*

*Or you may cause your Pikes to stand, and Musquetiers to move all into the Front, then join them before the Pikes, which is the better way. But whether your Musquetiers be all in Front, or on the Flank.*

The





Observe this  
way of re-  
placement, by  
interchan-  
ging of  
Ground.

If you would reduce your men from this figure, without firing, (your men being sufficiently expert, let the *Musquettiers* stand, and *Pikes* face to the *Rear*, and so the wedges will stand faced in *opposition*: next, command them to *interchange ground*: the *Musquettiers* advancing forwards, into the *ground* of the *Pikes*, and the *Pikes* moving into the *ground* of the *Musquettiers*; then by facing the *Pikes* to the *former front*, the *Body* will stand in form of a *Diamond* again.

If you would reduce this Figure again into the form of the Diamond, by firing your *Musquetiers* being now all in the *reere*) the body must face about: and so the firing will be contrary to the former. But if you wheel them about, they may give fire the same way. Howsoever after they have given fire, they are to wheel off by division, and to place themselves in the *Reere* of the Pikes, even in rank again, as they were when at first they gave fire. Thus having all fired over, and wheeled away; the Pikes may charge: and being again advanced, the body will stand in form of a Diamond: and this I pray you to conceive, for I intend not to remake the Figure.

An oblique firing from the Diamond, the Muskettiers Company, marching & making a steep wedge. The drill for this firing.

The second way of firing on the *Diamond figure*, is by way of *Countermarch*: and is an oblique firing. For whereas in the other firing by ranks (in the *Diamond Battell*) each rank fired by increase of two (beginning with one, and ending with fifteen in a rank) this firing, contrariwise, begins with 15 and ends with 1, still decreasing 2. For this firing, your files must be at open order, because the *Musquetiers* must countermarch down between the *Intervals* of their own files to the right: every musquetier that finds himself without a leader, being to present and give fire: and then to countermarch to the right, placing himself in the *Reere* of his own file, behind the Pikes. When the first 15 have fired, then the next 13 present, give fire, and countermarch, still placing themselves in the *Reere* of their own files. Next there fireth 11 then 9, &c. for still there fires so many, as are clear from any leaders. And in this manner of firing, they that fire together, stand neither in rank nor file, but obliquely. When all the musquetiers have fired, and are countermarched into the *Reere* of their own files, let the *Pikes* charge: and then the form of your *Battell* will belike a deep wedge: as you may perceive by the following Figure, where your Ranks are become two and two of a number.

### Front

Front.

E C  
 S F P P P P P P P P P P P P P P P S  
 D M P P P P P P P P P P P P P P M D  
 M P P P P P P P P P P P M  
 M M P P P P P P P P M M  
 M M P P P P P P M M  
 M M M P P P P M M M  
 M M M P P M M M  
 M M M M P M M M  
 D M M M M M M M D  
 M M M M M M  
 M M M M  
 M M M M  
 S M M M S  
 M M M  
 M  
 M  
 L

Recre.

\* Your men standing in this form of a *deep wedge*, if you please yet to be more curious, face them all to the *Rear*, and command your *Musquetiers* to march 10. or 12. paces. Your *Pikes* to stand, which done your *Musquetiers* will present you with an *hollow wedge*, and your *Pikes* with a *solid wedge*. \* Lastly, to reduce all these severall forms into the first proper square battell: first, let the *solid wedge*, close forward, into the hollow of the other: then, let the *Musquetiers* make ready, present, and fire, as before: That is to say, Every *Musquetier* that finds himself without a leader, is to give fire, and to counter-march to the rear of his own file, the rest doing the like, successively. When they have all fired, and are counter-marched clear, let the *Pikes* charge: and then your body will have the form of a *Diamond* again. \* Next, face them all to the *Rear*, and command, *rank*, file 8 to the right. Which being done, passe thorow the *Musquetiers* which belong to the *left-flank*, into their places; and close the *Musquetiers* of the *right-flank* to their due distance: this done, they will stand all properly reduced, into the *Square*, as at first.

\* *Carriofit* sometimes not to be neglected because some men being therewith delighted, may thereby be gained to affect the practice of arms, and after some continuance therein, may haply prove, solid, and good soldiers.

CHÁP. LXXIX.

*Of the Convex half-Moon; The use of the Figure: and of severall wayes of firing upon it.*

**T**He *Convex* half-moon, or *Semi-circular Battell*, is a form in It self both good and useful; which the time, the number, and place (with other circumstance) may make either beneficial, or prejudicial: wife Captains and Commanders ever fore-seeing with providence, what forme or figures may be most profitable and available for the present service. \* This *Convex figure* may be usefull, either at the landing of *Souldiers* in an enemies *Country*, or for necessity (the enemy being more able in *force*) making use either of *bedges, ditch, wood, creek, or river*; to secure the *Rear*. For the figure it self, it may be made many wayes; either with the *Musquetiers* outermost, or innermost, or lined, &c. at the discretion of the Commander. It may also be made in a *Regimentall* way, or after the way of a small and private Company: But because I have onely in this my small *Treatise*, taken upon me to shew the *postures, motions, and figures*, which are most usually done in a small Company (although many of them, yea the more part, may be very fit for larger *Batties*) I shall content my self, to sail in a small bottom, not desiring to put on more sail then will suffice for the bearing of so small a burden. Wherefore my request shall be, that every court and skilfull *Pilot*, that shall come aboard this small *Boat*, will be pleased neither to launch it into the main,

\* Reducement.  
\* This facing to the rear, makes the Musketeers to be again in the Van.  
(a) The usefulness of this Figure.



The Battell  
onto make  
this Figure.

left it be *swallowed* in the *Surges*; nor to *expose* it to the danger of *shelves*, *rocks*, and *sands*, lest it suffer *shipwrack* for want of good *guidance*, but so to *steer* it, that it may safely arrive at its desired *Harbour*: wherein they will both honour themselves, in expressing their virtues, and gratifie me, by applying each motion, figure, and form, to his right use, and true intention. I will now shew, how the *Figure* is to be made, which is as followeth. If your *Battell* be in form of an *Hearst*, then wheel them to the right or left about; untill they have attained this *Figure*. But if in a square, then observe these following words, which will produce the *Figure*.

*Wheel your Flanks into the Front; then face the Body to one of the Flanks: and wheel your Battell into a Convex half Moon.*

If your *Body* be large, then instead of *wheeling the Flanks into the Front*: cause your *Musquetiers* to *move forwards*, and place themselves *before their Pikes*. Then Command 5. or 6. of the *outermost Files on each Flank* (both *Musquetiers* and *Pikes*) to *wheel*; those on the *left flank to the left*, those on the *right flank to the right*: the rest of the *Body* in the mean time moving forwards to a convenient distance, and 5. 6. or more of the *outermost Files* to stand, and then to *wheel to each hand*, as aforesaid; the rest doing the like successively, untill you have *formed*

*The Convex half Moon.*



The Battell  
moves to  
fight upon  
this convex  
figure.

Having brought your *Souldiers* into this *Convex* form, you may face them all *inward*, for *speech*; or *outward* for *Fight*. Then let the *Officers* make *Intervals* for the *Musquetiers*; and let the *outermost Arch* or first rank of each division, present and give fire, those of the right flank wheeling off to the right, the left flank to the left; placing themselves in the *Reere* of their own divisions of *Musquetiers*, still making good their leaders ground. The rest of the ranks are to do the same: untill they have all given fire. Nevertheless, if your enemy be too potent for you, by reason of

of his Horse, your *Ben-Pikemen* need not stand idle, although they stand behinde their *Musquetiers*: for that they may ply them faster with their shafts, then the others can with their shot; But if the Horse be so violent, that the *Musquetiers* may not abide them, then let them give Fire, and wheel off by division, as before; passing quite thorow their *Intervals*, and placing themselves in the Reere of their *Pikes*, every rank making good their Leaders ground. Thus also are the rest of the *Musquetiers* to give fire, placing themselves in the concave part of the body, as afore said, following in the Reere of the *Pikes*, which now make good the *Musquetiers* ground. If need be the *Pikes* may charge over hand, or if occasion serves at the foot, drawing forth their swords over their left arms, and couching down their heads: by which means the *Musquetiers* may give fire over their shoulders. For the first rank having Fired, may kneel down on the ground, and charge again, the second rank may give Fire, and kneel in like manner, making ready again. And so for the rest, all giving Fire, and kneeling on the ground, that so the next rank behinde may give Fire over them. Thus continuing the firing untill all the *Musquetiers* have given Fire, once over. Nevertheless, if the enemy shall still continue his charge, and presse upon you, the first rank may rise with the rest, and give Fire over again, as before. And so the battell may be continued; the *Pikes* still keeping off the Horse.

For the *reducement* of this figure, and to bring every man to his place, let your *Musketiers* (either firing, or passing thorow) be brought into the places they were in, before they first gave fire. Then face the whole Body to one of the flanks, and march them untill they have evened their ranks, and straitened their files. This done, if all your *Pikes* be on the right flank, wheel your right flank into the midst, if on the left flank, wheel front and reere into the left flank. This being done, let the Commander passe to his proper file-leaders, and face the whole Body to him, and they are reduced as at first. If you did not wheel your flanks into the front; Bat your Body being large enough, you drew your *Musquetiers* before your *Pikes*: Then having ranged your Body even abreast: Command your *Musquetiers* to open to the right and left, untill they are clear of the *Pikes*, then face to the first front, and march up even abreast with the *Pikes*, and they are Reduced as at the first.

## CHAP. LXXX.

Of Extraduction: the severall uses, Firings, and Reducements.

THE next Firing which I shall take upon me to demonstrate, shall be by way of *Extraduction*: which is also a firing in front. It may be to singular good use, in a straight or passage, where your *Wings* and Reere may be secured; your enemy being supposed too powerfull and potent for you. Also if the contrary side abound in Horse or foot; I should then advise to draw some of your *Musquetiers* into the Reere of your *Pikemen*, who may give fire under the shelter of their *Pikes*, being either ported or charged: And indeed I shall give this Firing by *Extraduction* this testimony, That of all Firings (defensive or offensive) (those of the half pike and firmer feathers excepted) it is the best and safest against the Horse that yet I know of; each arms becoming the absolute security of the other, and may be useful either in small or greater Bodies. But this Chapter treats onely of a party or single Company, and conceives it to be chased or pursued by horse, but they having gotten into some straight, there fill the mouth of the passage with your *Pikes*: and if the length of your Company be not sufficient to do it, then double your ranks (as in this following figure) and let your *pikes* either order, advance, port or charge: according to the occasion; your *Musquetiers* being in the Reere, may march up into the front, and Fire. But before I shew the Firing, observe these following directions, which produce the Figure,

The Best and  
Pike very  
good and use-  
full against  
the horse, in  
this figure of  
Battell.

A good way  
in time of  
necessity, to  
beat off the  
influence of  
the Horse.  
Another way  
to give fire  
by extradu-  
ction, as in  
the next  
Chapter.  
Reduction;

The use of  
this firing by  
Extraduc-  
tion.

Pike

This Com-  
mand con-  
veys the bat-  
tle either fa-  
ced or wheel-  
ed about.

The Musk-  
tters in this  
firing are to  
steve up  
file wise to  
the front, and  
there give  
fire in rank;  
cross the  
front of the  
Pike men.

The directi-  
on for this  
firing.

If the Pikes  
charge, the  
Muskettiers  
must give  
fire wheel-  
ing on the  
ground.  
Another way  
of placing the  
Muskettiers  
on this firing.  
The reduc-  
ment.

Pikes stand, Muskettiers face to the reere, and march, untill you are clear of your body of Pikes.  
Then face inward, and close your division: that thing done, face to your Leader, and double your Ranks,

This being performed, the Pikes are all in front, the Muskettiers in Reere,

A firing by Extraduction.

Front.

S M M M M M M M M M M M M M M M M S  
P P P P P P P P C P P P P P P P P M  
P P P P P P P P D P P P P P P P P M  
P P P P P P P P E P P P P P P P P M  
D P P P P P P P D P P P P P P P P M D  
..... Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z  
M M M M M M M M M M M M M M M M M  
S M M M M M M M M M M M M M M M S

L

Reere.

Having ordered your battell in this manner, let the first rank of Muskettiers (which are those that follow next after the pikes) face to the right, and march forth (file wise) up close by the right flank of pikes, untill he that is the leader of them be come into the front of pikes, then he is to lead them quite cross the front of pikes, untill he have attained the further part of the front to the left; which being done, they are all to stand, present, and give fire. You must note withall, in this Firing, that he which was the right hand man of the Rank, and was the Leader of the motion, now becoms the left hand man, when he gives fire; and that having fired, they are to wheel off to the left, close to the left flank of Pikes, and so to fall in the reere of the Muskettiers. In the interim, whilst that the rank which first fired is wheeling away, the second rank is marching into their places to give fire. And in this manner they may maintain their Battail, so long as they please: the Pikes either porting or charging all the whiles. The Muskettiers in the time of their crossing the front, are to couch, or stoop under their Pikes; that so they may be no impediment to the Pikes in their charge. There is another way of firing by Extraduction, which is, that the right hand leader of Muskettiers, placeth himself before the right file-leader of Pikes: the rest all falling beyond him: nevertheless because I conceive it not to be so good a way as that already shewn, I will not trouble you with it: but come immediately to the reduction of this, which is as followeth. Command your Pikes to stand, and your Muskets to double their front by division: but if you want room to do it, then first double your files to the contrary hand of that, which you doubled your Rank; and so having doubled by division, as aforesaid, they will be reduced, as at first.

## CHAP. LXXXI.

Of the Broad or long fronted Battell, with the wayes of firing upon it.

THE broad or long fronted Battell, must needs be of speciall use; for many occasions; either offensive or defensive. Which because it is so apparant to all, I shall not need to stand to reason with any; rather desiring to shew the manner of making and reducing it: which is as followeth. Cause your Pikes to stand, and your Muskettiers to march, untill the Reere rank of the Muskettiers be advanced a little before the first Rank of Pikes; then let the Muskettiers face inward, (or in opposition) and close their divisions; and then face to their Leader. And if you would bring more hands to fight, double Ranks to any hand, and the body (for form) will stand like the figure here next following. But the speediest way, (and I think the best, I am sure with expert Souldiers) is to \* wheel both flanks into the front, which is the way intended by this Figure.

Direction to  
make the  
broad front-  
ed Battell.

\* This wheel-  
ing is intend-  
ed but for a single Company; for if there be more Companies, then the way first shewn, is for the better.

For

For the manner of the Firing is self, you may partly perceive that there are *Intervals* made for each division to wheel off to the right, that so they may either fall in the *Rear* of the Muskettiers and there continue the firing; or else fall in the *Rear* of the Pikes, and be thereby secured from the horse. It may be done, one or both ways: according to the occasion or discretion of the Commander. Nevertheless, before I shew the firing, observe these words of Command, which produce the Figure.

Wheel your Flanks into the Front.

Face to your Leader.

The broad-fronted Battell.

Front.

S M M M M S M M M M M M M S M M M M S  
M M M M M M M M M M M M M M M M M M M  
M M M M M M M M M M M M M M M M M M M  
D P P P P W D E W C D W D W  
P P P P W P P P P W P P P P W P P P P W  
P P P P W P P P P W P P P P W P P P P W  
P P P P W P P P P W P P P P W P P P P W  
P P P P P P P P P P P P P P P P P P P

L

The first Rank having presented, and given Fire, let them wheel off to the right: all passing down the *Intervals* to the right, and placing themselves in the *Rear* of their own divisions of Muskettiers: The next ranks of Muskettiers making good their leaders ground; Firing, wheeling off, and placing themselves as before. Having Fired once or twice over this way, a second way may be to place themselves in the *Rear* of their Pikes, either standing or advancing: the Pikesmen in the meantime clouding the clear sky, with their airy Armour. The Muskettiers having all given Fire, and placed themselves in the *Rear*: if need be, the Pikes may close their divisions, and charge over-band: and if the enemy shall still presse forwards, the Pikes may charge at the foot: the Muskettiers giving fire over them, or by Extraduction, as in the last Chapter.

For reduction, there are divers ways by Firing, but because I would make every thing so plain and easie, that those that read for instruction, may receive benefit, it hath caused me to reduce each Figure by it self, and not to multiply one upon another, whereby to make them too ambiguous. And therefore if you make this Figure by wheeling your Flanks into the front, and then Fire, as aforesaid, the reduction may be, either to Fire them over again, and so to fall into their former places, and then to wheel your flanks into the Front again: and lastly, face about to the right, and they will be as before. Or else if you would reduce them without giving fire over again, then command your Muskettiers to double your Front by division: that done, wheel both Flanks into the *Rear*, then face to your leader: and command your Muskettiers to double your Front by division again, and they are as at first. If I should proceed to shew the many and sundry ways of Firings, which may be done in Front, my Book had need to have as many leaves as lines: and yet all too little. But that I may keep my self to my promise, and my Book to its compass: I will next come to shew some Firings in the *Rear*: and amongst my divisionall Firings, I shall insert some other sorts of Front Firings, which here I have omitted.

CHAP. LXXXII.

Of dismarching, or Firing in the *Rear*: the severall ways, and how they ought to be performed.

HAVING so long maintained Battell in the Front, I will now face them about, and see how they will behave themselves upon their Firings in the *Rear*. Which kinde of Firings may be very beneficiall and serviceable many ways. For by keeping an orderly March and Firing in the *Rear*, the eager enemy, by too hasty pursuit, may be disordered. Or if it so happen (as many times it doth) that you have a disadvantageous place to imbatell on, by this Firing you may march away:

N

still

The direction for the firing.

A second way of placing the Muskettiers upon this firing.

There is a second way.

Note that the second Firing will cause the enemy to face in the *Rear* which then becomes a front accidentall and is the cause that the some commanders place the figure which I have made.

The best and use of Firing in the *Rear*.



still preserving your order and array, untill you have brought your adversary into some ambuscage or such like inconvenience. \* For the manner of coming to the firing, it must either be by facing about, wheeling about, or countermarching: the Pike are to be shouldered. The figure followeth.

### *A Firing in the Rear.*

[illegible]

The direction  
for this strong  
may be 1070.

The *Body* being upon a *march*; if the *enemy* appear in the *Rear*, let the *last rank* of *Muskettiers* face about, and give fire; then wheel off by *division file-wise*, marching up toward the *front*, and there placing themselves before the *foremost rank* of *Muskettiers* (the two *minutest* men of each *rank* being the *leaders* up of those which have fired) who are the first that take their places on the *out-side*, the rest wheeling about them, and ranking even with them on the *inside*; ever observing, that they range even with the *second rank* of *Pikes*. The rest of the *Muskettiers* also doing the like: and in this manner to continue the *firing*, as occasion shall require. Nevertheless, of all the *figures* and *firings* that ever I have seen, this hath been the *worst* performed in all places; which might easily be amended, if the *soldiers* would observe this following direction; namely, when the *last Rank* of *Muskettiers* have presented to the *Rear*, and are giving of fire, the *Rank* which marched next before them, do then blow open, and present, at three motions: still keeping along even with the *Body*, untill that (lastly) they present to the *Rear*; by which time, the *Rank* that last fired, will be wheeled away. The next *Rank*, so soon as the other hath presented, is likewise at 3 motions, to do the same: and so, successively, for all the rest; every *Rank* observing, upon each *Rank's firing*, to lose one; and to march one *Rank* nearer to the *Rear* of the *Battall*, that so that part may still be kept firm and absolute.

This *giving of fire towards the Rear for service*, is to be continued; according to the quality of the *place*, the *occasion for fight*, and the discretion of the *Commander*. In *exercise*, we commonly do it but once over; and then (if you please you may make *Alas*) and *face your Body about*, giving fire over again, and *charging your Pikes upon it*; if need so require, or at discretion of the *Commander*. Notwithstanding, if the *horse* still pursue you in the *Rear*, you having gained some *strait*, or *place of advantage*, may *wheel your flanks into the Front*, then *face to the Rear*, and with your *obsergd Pikes* defend your *Muskettiers*: which (the *body being so wheel'd*) will be in the *Rear*. The *body* standing in this *form*, the *Muskettiers* may *sleeve up by way of Extraduction*. The *manner*, you may perceive in the *Chapter* which treats of that *figure*. If the *Horse* still press forwards, cause the *Pikes to charge at the foot*; the *Muskettiers giving fire over them*, as in the *Convex half Moon*. Lastly, to *reduce them*, having thus *fired*, command them to *wheel their flanks into the front* and to *face about* after their proper *file leaders*, and they are *reduced*. Sometimes, we *give a fire in the Rear*, having all our *Muskettiers marching in the Rear* of the *Pikes*. For the *manner of the motion*, it is as before: but for *placing of the men*, after they have *fired*, it may be different. As, to *wheel off by division*, placing themselves in the *front* of the *Muskettiers*, next *behind the Rear* of the *Pikes*. Or if the *body* be large, to *wheel all off to the right*, through *Intervals*, and so to *march into the front* of *Pikes*. Or else they may *wheel off by division*.

Move upon all  
 things in the  
 River to bid  
 your cold sleep-  
 ing forwards  
 with your  
 right ear.  
 O, on your pain  
 sleeping for-  
 wards with  
 your left foot,  
 to sleep on a  
 long rest as  
 hand so which  
 you are so in  
 about your  
 in the River  
 sleeping for-  
 wards with  
 your right foot  
 to sleep of  
 the things in  
 the foot on  
 over, is much  
 useful for  
 small dis-  
 ease.  
 The Chap. 7.  
 In Chap. 7.  
 Reducers  
 A second  
 order of 11  
 on the River.



*division, and flank their Pikes, and so fire over again, as before. If you have brought your Muskettiers (by firing to the Rear) before the fronts of Pikes, then to reduce them, you may either wheel the body about, and give fire in front, causing your Muskettiers to fall off by division, and to flank their Pikes, as you may perceive by the figure of the Demy-bearse. Or else, if you will reduce them without a firing, cause your Muskettiers to open to the right and left: and the Pikes to march up in the midst: after which, facing all to your first front, they are as at first.*

I might have shewn a Figure for each of these severall firings in the Rear, which would have delivered them with more variety: but I conceive that this here already express, may suffice: especially this being the ground of what may be spoken. Concerning firings in this nature, many men are of many minds, about this firing in the Rear. Some will have it, that the last rank shall at one motion, face to the Rear: and there present, and give fire. Others will have it at two motions; but either of them have their inconveniences. For however they pretend a more sudden execution, they are deceived: for would they make trial, by causing the Muskettiers of one of the flanks to give fire at one motion; and the Muskettiers of the other flank, at three motions, (as I have here set down) they should soon finde, that the firing upon three motions were the best: and that the other would be cast so far behinde their Body, that they would be in some danger to be cut off. Besides this, they are longer in clearing themselves from their own men, which all the while must stay, untill they are marched off: or else kill them, instead of the enemy, whereas in this other firing upon three motions, they still keep along with their Body, doing their execution more suddenly and more safely. Nevertheless there be many so much wedded to their own wilfull opinions, that they will more willingly persist in a known error, then be seen to alter, what they have seemed to maintain. But leaving such to steer by their own compass, I will here conclude my firing in the Rear. And the next I shew, shall be Firings in flank: to which purpose, I passe all my Muskettiers to the right flank. The words of direction for it, are these.

*Muskettiers of the right flank, open to the right (or face to the right, and march.) When they have opened to a sufficient distance, then stand.*

*Muskettiers of the left flank, passe thorough between your ranks of Pikes, to the Intervall on the right flank: Then stand, and face all to your leader.*

### CHAP. LXXXIII.

*Of firings in flank, in general, and more particularly, of the gathering firing.*

THE Muskettiers being all on the right flank, (as in the last Chapter is directed) it would be needlesse to make a Figure, whereby to demonstrate the standing of the Body, seeing that none can be so ignorant, but must needs know that all the Muskettiers being upon the right, the Pikes must be upon the left. Nevertheless, I shall endeavour to shew what is meant by firing in flank. (Which for the general) are of these 2 kinds. The first is, when the enemy skirmishes with us in flank, as we march, the other when as by some sudden attempt or ambushment, the party, division, or whole Body is engaged, and so forced to stand, and face to the right, or left, or both: By which facings, the Flanks become Fronts accidentally, and their firings will be after the same manner of the firings in front. Wherefore seeing I have already spoken sufficiently of them. I will now shew firings in flank, marching: the particulars whereof, are as followeth. \* The first is for the outmost File, to give fire, and stand untill the next File have fired, which by some is called, The gathering firing. Secondly, Firings in flank, and leading them up between the Muskettiers and Pikes. Firing in flank, being led off by the Banners up. Firings in flank, sleeving up on the contrary flank of Pikes. Firing in flank, and drawing them up between the innermost Files of Pikes. \* All these firings in flank, are to be performed upon a march, the Pikes are to be shouldered. Our first firing in flank followeth.

*A reduction for this way of firing in the Rear. In Chap. 76.*

*Many different opinions concerning firings in the Rear.*

*Firings at 3 motions, in the Rear the best.*

*There is no error, which hath not some slippery and bad foundation, or some appearance of probability, resembling truth.*

*What is meant by firing in flank.*

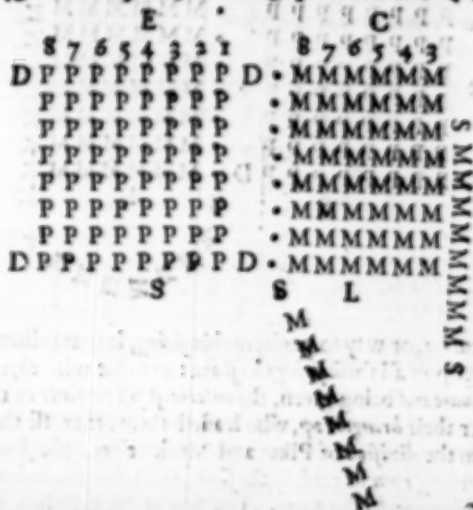
*\* The doors and several ways of firing in flank marching.*

*\* Upon all these firings in flank marching, the Pikes are to be shouldered.*



preservation: both in securing the *Musquettiers* (after they have *Fired*) from the danger of their enemies shot: as also in continuing the *Body* in the without separation. It is especially usefull, when two enemies are divided by a *River*, or by some such like means secured from the incursions of the *Horse*. For then, by this way of drawing the *Musquettiers* up between the innermost File of *Musquettiers*, and the outermost File of *Pikes* to the right: your *Battell* may be continued, according to the occasion, or the *Commanders* discretion. The *Figure* followeth: The *Command* is;

*Musquettiers, give Fire in flank, marching up between the Pikes and Musquettiers.*



The way to perform this *Manner of Firing*, is as followeth. The outermost File being commanded to face so the right, and present, the rest of the *Body* marcheth away, as in the other *Figure*, and the standing File gives fire. This done, and that the *Body* is marched clear of the standing File, the next File presents to the right, and the File that first gave Fire, faces to the first *Front*, and is led by a *Sergeant*, crosses the *Rear* of *Musquettiers*, and up between the *Muskets* and *Pikes*; the *Musquettiers* are still to open to the *Rear* of *Musquettiers*, and up between the *Musquets* and *Pikes*; the *Musquettiers* are still to open to the right, as they march, that so there may be room for one File to march, up between them and the *Pikes*. And so (successively) each File having *Fired* marcheth up next unto the right flank of *Pikes*. When all your *Musquettiers* have given Fire once over, they are reduced as at the first. The *Battell* may be continued, at discretion. The next *Firing* in flank (for the manner of execution) will be all one with this: the difference will be in the *moving off*, and placing the *Musquettiers* after they have *Fred*.

The direction for this firing.

The firing being performed, the musketeers are reduced as at first.

# CHAP. LXXXV.

*A Firing in flank, led off by the Bringers up.*

The next *Firing* in flank, which I propose to your perusal, will be nothing differing for manner of execution, from the *Firing* in flank, formerly shewed. The only difference arising between them, is, That the other Files of *Musquettiers*, after that they had given Fire, were led off by their proper File leaders; and this, to the contrary, must be led off by their *Bringers up*. And this indeed, if the *body* be upon a slow march, is the readiest and quickest way: and doth more speedily secure the *Musquettiers*, after they have given Fire. The words of *Command* and *Direction* which produce the *Firing*, are as followeth.

The off of this firing, in flank.

*Muskettiers give fire to the right & wheeling off, after your Bringers up, and placing your selves between your divisions.*

*Front.*



*The drill-  
on for this  
firing.*

For the manner of execution, or way to perform this firing, it is as followeth. The Body must be conceived to be marching upon all these firings in flank: and that with their Pikes shouldred. This being presupposed, the Command being given, the outermost file presents to the right, and gives fire: then faceth to the right, after their bringers up, who leade them off, crosse the Rear of Muskettiers, marching them up between the division of Pikes and Muskettiers, the Bringers up supplying the file-leaders place; and marching even in rank in the front, with the file-leaders; the file-leader of the same file, becoming the bringer up in the Rear. The files of Muskettiers, or Pikes (according as the command shall be given) are as they march, to open; thereby giving way to the Muskettiers, after they have fired, to come up between the divisions, and so soon as the first file that fired, is clear from the right flank; the second file presents, and fires; in like manner wheeling off, as before, and marching up between the Pikes and Muskettiers; every file successively giving fire, and wheeling off as aforesaid. This firing may be performed once, twice, or oftener over: according to the discretion of the Commander. Nevertheless, if it be twice performed, the men are reduced as at first; every man having his right place. If you fire them but once or thrice (or any odd number of times) over, then you must counter-march your files of Muskettiers to reduce them. There is another way for the bringers up to wheel off, and each of them to lead off his file; untill he comes to the Rear of the division which is between the Muskets and the Pikes; and there he is to stand, and rank with the bringers up, the rest that follow, passing on forwards, by way of Introduction, and every man ranking before him that was his leader in the wheeling off; untill the proper file-leader be come into his place again. And after this way, they may give fire; each firing being his own Redoucement.

*The first firing is reduced by doing the same over again. Another way of placing the Muskettiers, when they are led off by the bringers up.*

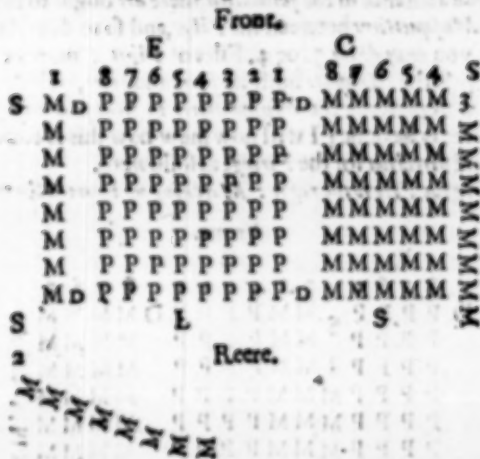
#### CHAP. LXXXVI.

*The difference between Firings in Flank, marching: and of bringing the Muskettiers on the outside of the Pikes.*

ALL, or the most part of the firings in flank, which are performed marching; in point of execution, are the same: the especial difference between them, being either in the manner of the wheeling off, after they have fired, or in the material placing them, whereby to make them more offensive or defensive. And this appeareth by the next following firing: which is to be used at such

Such time and place, when as there may be doubt of the *enemies* horse: And therefore, for the more security of the Muskettiers after they have fired; they are to be drawn up on the outside of the left flank: \* If haply there may be some hedge, ditch, river, hill, marsh, wood, or such like convenient safeguard; whereby to shroud them from the fury and violence of the horse: that so the Pike-making *Alt*, and facing to the enemy, may charge, and with their armed points (strongly and closely couched) receive and abate the fury of the first shock. \* And if need be, the Pikes may all charge at the foot, closely serried together, with their swords drawn, and the Muskettiers may give fire over them. But lest I anticipate my self, in shewing these: I will return to show the manner of the firing, intended by this following Figure. Onely first take the words of Command and Direction, which are as followeth.

Muskettiers, give fire to the right: placing your selves on the outside of the left flank of Pikes.



\* *Detachment of place, often affords good help in time of need, as the artful and industrious soldiers.*  
\* *Or else a better way is to give fire by extra volleys as in Ch. 20.*

The outermost Files having presented to the right; the rest of the body continueth the march, whilest they in the mean time, are giving fire. Which being done, and the body clear, the next outermost file presents; the file that last fired, in the interim, falling up the left after their proper file-leader; who leadeth them cross the Rear (both of Musquets and Pikes) a pretie round pace, steering up on the outside of the left flank of Pikes. The next file having in like manner fired, doth also troop up on the outside of the file, led off before; every file giving fire, and doing the like. When all have given fire, and are cleared away, then the Pikes may charge: which is very necessary, to accustom the Souldiers unto in times of exercise, both for charging on, and retreating, as also to push with their Pikes, that so by practise they may be able to do it, orderly, either way: still keeping their order and array. Having given fire upon the right flank, and drawn all your Muskettiers in this manner to the left flank, it you will cause them to give fire on the left flank, and bring them back again to the right flank, they will be reduced. Or if you would reduce them without a firing, then either pass your Muskettiers throw between your Ranks of Pikes, or else let your whole division of Muskettiers be drawn cross, either the front or rear of Pikes, into their places: or by division (if you please.) Your Muskettiers also, may give fire in flank: the first file steering up on the left flank: the rest of the files, still falling between the Pikes and the Muskettiers which wheeled off the left before them. And this is also a very good firing, and may be reduced with.

The direction on fire this firing.

It is good to accustom the Pike to charge.

They may be reduced by interchanging of ranks.



with doing the likeback again: and many other ways, they may also sell off after the manner of the Figure last shewn: being led by their bringers up, either into the front, or else after the manner as is discoursed in the latter end of the last Chapter. But I conclude all I say, to content my curiosity: lest my Folly should exceed my intent. And therefore I will leave this one Fling more to stick upon a marble or brass: which I will conclude these four of *Finis*.

CHAP. LXXXVII.

Of Firing in flank, and placing the Musketeers in the midst of the Rout of Pikes; (the former) is with other Firings, from thence proceeding.

...of  
...F...ing

**F**iring in *flank*, and bringing them off between the midst of *Pikes*, is to be used at such times, when as you would secure your *Musquetiers*: the place (otherwise) affording no natural convenience of succour, such as I have formerly spoken of: and therefore by this manner of *falling off*, where we want natural assistance in the *seizure*, there art ought to supply us; namely, by contriving to bring up the *Musquetiers* between the *Pikes*, and so to defend them from the fury of the *Horse*. And, if need be, you may *draw* 3. or 4. Files of *Pikes* (more or lesse, according to your number, or the danger) *cross* the *Musquets* both in *front* and *reare*, which are in the midst between the *Pikes*, which will as well preserve the *Musquetiers* in *front* and *reare*, as in *flanks*. But leaving further to discourse, what may be done, I will now shew how this is to be done. Onely first take the words of Command and direction for the *Firing*, as followeth.

*Musquetiers, give Fire to the right: Advancing up between the midst of Pikes.*

Front.

E C  
 8765 214321 8765  
 D P P P P S M M P P P P D M M M M S  
 P P P P S M M P P P P M M M M  
 P P P P 3 M M P P P P M M M M 4  
 P P P P M M M P P P P M M M M  
 P P P P M M M P P P P M M M M  
 P P P P M M M P P P P M M M M  
 P P P P M M M P P P P M M M M  
 D P P P P M M M P P P P D M M M M  
 S M L S  
 Recd.

The direction for this Firing.

The *Command* being given, for the *outer-most File* to *present* to the *right* (as formerly in the other *Firings* in *flank*.) the rest of the *body* still *march*th on; untill that the *outer-most File* hath *Fired*, and is *faced* to the *left* again, following their *Leader*. He now leading them *off* to the *left*, *march*th up between the *middle-most Files* of *Pikes*; who are then to *open* to the *right* and *left*, so to give them *rank* to *march* up between them: In the mean time, the *next File* having *given Fire*, *wheel*th off in like manner, *marching* up on the *left* of the *File*, which *Fired* last before them. And so successively, for all the rest of the *Files* of *Musquetiers*, all which are to give *Fire*, and to *wheel* off, as aforesaid, placing themselves still on the *left* of the *Files* which *last Fired*. Wherein is still to be noted, that the *Files* of *Pike men* are still to *open* to the *right* and *left*, and that for the receiving of the *Musquetiers*, after that they have *given Fire*. This *Firing* (as all other the *Firings* in *flank*.) may as well be led off by their *Bringers* up, as by the *File-leaders*: and then the *Reductions* will be answerable. The *Musquetiers* having all *fired*, the *Pikes* may *charge* at discretion.

The

The *Bow-Pike-men*, which are in the *Reere* of the *Musquetiers*, in the mean time not sparing to send their *showers of arrows*, amongst the thickest of their enemies, and it need require, the front of *Pikes* charging at the foot, with their swords drawn; the *Musquetiers* may give fire over them, rank after rank; for the *foremost ranks* having fired, may kneel upon the ground; and there make ready again: untill the other ranks behind him have likewise given fire. After this manner the *Battell* may be continued: according as occasion shall require. For *redoublement*, and to bring the *Musquetiers*, into both *flanks* again, as they were before I begin these *firings* in *flank*; command your *Pikes* to face inward, and your *Musquetiers* to the right and left outward, and so to passethorow, and interchange ground, then facing them to their leader, they will be reduced, as at the first. I would have the ingenious Reader to conceive, that all these *firings* in *flank*, may as easily be performed to the left: and with the same words. Only the words of right, must be changed for left; and left for right. I might have further enlarged my self upon *Firings* in *flank*: but these already exprest, may suffice for to instruct the ignorant. As for the skillfull and experter sort of *Souldiers*, I shall rather request their approbation, then presume to write ought, which may seem to passe me with the least conceit, tending to their instructions. Wherefore, for the further prosecution of my intended discourse, I will next shew some divisionall *Firings*. And (for method sake) I will first begin with *Firings* in *Front*, and *Reere*: which may be performed either marching or standing. And to that end, suppose your *Musquetiers* to march all in *front* and *reere*. Nevertheless, because it will not be amiss, to shew with what words of command and direction the *Musquetiers* may be brought thither: therefore take notice from what part of the body they are taken. And if they be in the midst (as by this last *firing* in *flank* they were brought) then command the half files of the *Musquetiers* to face about: which done, let the *Pikes* stand, and the *Musquetiers* march, untill they are clear both of *Front* and *Reere* of *Pikes*, then let them stand; and face to their leader: which being done, your *battell* will stand in form of an hollow square. In which hollow, may be conveyed any carriage, or such like. But if you will not have your *battell* hollow, then command your *Pikes* to close their divisions; and the *Musquetiers* will be a line in *Front* and *Reere*. If your *Musquetiers* be on the *flank*, and you would bring them into the *Front* and *Reere*, then after the same manner let the half files of *Musquetiers* face to the *Reere*: and then both half files of the *Front* and *Reere*, march untill they are clear of the *Angular Pike-men*. This done, let them face in opposition, and close their divisions: after which, having faced all to their leader, they will be rightly placed; namely, the front half files of *Musketters* before the front of *Pikes*. Thus will the *Battell* be somewhat near the form of an *Hearse*, and the *Musketters* be ready to give fire to the front and reere, either marching or standing. But before I begin my divisionall *firings*, I would intreat you not to expect, that I should reduce every particular *firing*, so soon as it is performed, as I have done by these hitherto shewed, but rather let it be suitable to your likings, that I reduce *firings* by *firings*: sometimes giving fire upon a *March*: sometimes upon a *stand*: sometimes to the front and reere, sometimes to both *flanks*. I do the rather desire: to go in this way, because thereby I may expresse far more matter, in fewer lines, and shorter time.

## CHAP. LXXXVIII.

Of firing to the Front and Reere, upon a March.

THE *Musketters* being all placed in the *Front* and *Reere* (according to the directions in the last Chapter) I will now shew the manner of *firing* to the *Front* and *Reere* upon a *March*. Which howsoever that it may be rare, and seldom useful in service, yet it must needs be excellent for practice. For by the often using it, the *Souldier* may be made capable of any *firing*: The *Pikes* (you are to understand) are to be shouldered. The Command for the *firing* is,

*Musketters* give fire to the front and reere, and flank your *Pikes*.

O

Front.

With the first division of *Pikes* charge, the rear division of *Pikes* (having banners) may do good service against the host.

The direction how to bring the *Musketters* to the front and reere, either from the midst, or flanks.

\* That is the front half files of *Musketters*, face inward, & the rear half files of *Musketters* face inward: then close together, before the front and behind the rear of *Pikes*. Your figure takes the denomination of a *hearse*, when the depth doth manifestly exceed the length which must be thrice at least.

Front.

S M M M M M M M S  
M M M M M M M M  
M M M M D P P P P P P P D M M M M  
M M M M P P P P P P P M M M M  
P P P P P P P  
P P P P P P P  
P P P P P P P  
M M M M P P P P P P P M M M M  
M M M M D P P P P P P P D M M M M  
M M M M M M M M  
S W W W W W W W S  
Rear.

The direction  
to the front,  
wherein you  
draw next,  
that the bluf-  
feters who  
are to fire in  
front, are to  
move nimbly  
8 or 10 paces  
before the rest  
of the body,  
that so they  
may have fire  
and wheeled  
away be-  
fore the rest  
of the body be  
far advan-  
ced. But if  
your body be  
large, find a  
division be-  
fore, which  
will be the  
better way.  
\* Note this  
direction.  
\* If need be  
the body may  
make 10,  
and charge to  
the front and  
rear.

The *Command* being given (as above said) the first rank presents, the last rank faces about to the rear, and doth the like, and so both giving fire together, wheel off by division. The one half of the rank following after the right hand man of the same rank, the other half after the left hand man, who leads them close down by the side or flank of the Muskettiers until they come to the Pikes. The first rank of Muskettiers now ranking even with the first rank of Pikes; the last rank of the Muskets, with the last rank of the Pike, leaving a sufficient interval betwixt them and their Pikes, for the other Muskettiers to march between. And here you must note, that he that was outermost when they gave fire, must likewise be outermost when they have taken their places on the flank. The first and last Ranks having fired and wheeled off, the next Ranks (marching on, as before; the first rank eight or ten paces before the front, the last rank at three steps to the rear) are in like manner to present, and give fire, wheeling off by division, and passing between the divisions, \* there placing themselves, they of the front division behind those which fired last before them, and they of the rear division before them which fired last, behind them, and so they may continue to give fire, untill they have all fired once over. \* Then may the body make a stand, and the Pikes charge to the Front and rear, if need be. Or if the Commander would continue his firing to the Front and Rear still upon the same Figure: Then let the Muskettiers of the Front, place themselves (after they have given fire) behind the Muskettiers of their own Division: those of the Rear division placing themselves betwixt the rear of Pikes, and the Muskets of their own division, and so the body moving but slowly forwards, they may continue the firing. Having given fire to the Front and Rear, and flanked their Pikes: if the occasion offer, or the Commander please; they may give fire to the Front and Rear, upon that Figure, which indeed I hold the better, as you may perceive in the ensuing Chapter.

## C H A P. LXXXIX.

*A second way of Firing to the Front and Rear,*

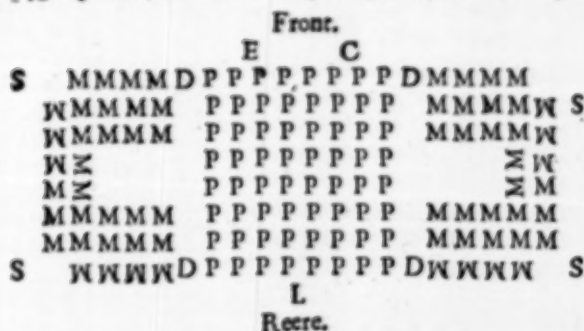
THIS second way of firing to the Front and Rear upon a march may easily be performed, if the Souldiers be well and often instructed. Without which, all matters in the Art Military will seem difficult, and by which, all things will be made facile and easie. I could instance in divers motions and figures, by some reputed, superfluous niceties, which were the true uses known to the Commander, and the way to execute to the Souldier, would be found to be of singular good service. \* Nevertheless, because to the ignorant, nothing beyond their capacities may seem excellent, many good and serviceable motions are slighted, and not accounted fit for service. But I could well wish, that some good course might be taken, that the Souldiers of our Trained Bands might have a little of more practice, that so they might be able (at least in some reasonable way) to understand and

Altho' you draw  
about these  
things, yet  
they are  
not to be  
under-  
stood.

exercise

exercise what shall be commanded them. But I have straid from the matter, and therefore take these words of command and direction, which being orderly executed, produce this figure following.

*Muskettiers, give fire to the front and reere, placing your selves between your divisions.*



The way to perform this firing is as followeth ( the Command being given ) the first rank advances 8. or 10. paces before the Front of the Body, there presenting and firing : the last rank of Muskettiers, in the interim presenting at three motions to the Reere, and there in like manner Firing, which done, they are to wheel off to the right and left, placing themselves between the Muskettiers of their own divisions. Those namely, which were of the Front half-files, falling into the reere of their own division, those of the reere half files (contrariwise) falling before their half-file-leaders, and ranking even with the half file-leaders of Pikes, the next ranks successively, firing and wheeling off after the same manner. Having fired once over, they are reduced, every man to his place. These two last firings to be performed upon a march, would seem very difficult to unexperienced Souldiers, but by often exercising they may be made capable of these, or of any other. Nevertheless the special use of this firing, is for small bodies, being charged in front and reere by disbanded Squadrons, or small parties : But if your Body be large, the best way will be to send out a considerable number of Muskets and Pikes before, to beat off the enemy : or if they be not able to beat him off, then to hold him up untill you have made good your retreat, and can either reinforce them with a new supply, or relieve them by bringing of fresh bands to maintain the fight.

The direction for this firing to the front and reere.

Reduction

## CHAP. XC.

*Firing to the Reere and right flank marching.*

Having already shown firings in front, reere, and flank, ( some marching, and some standing ) I will now shew one firing to the reere, and right flank, upon a march. The which without all question must be very serviceable at such times, as the obsequious and vigilant enemy, shall finde some opportunity to skirmish with the body, seeking to annoy them in their passage or march, charging them in the reere and flank, at one and the same time. I shall not need with arguments to enforce the usefulness of the firing, for none that knows any thing in the Art Military, but will ingeniously confesse, that in time of motion, either advancing, or retreating out of an enemies country, they shall be sure upon all advantages to be waiked upon by enemies, charging in this manner.

The use of this firing.

I might be infinite in examples of this kinde, both ancient and modern, but my intent is not to write a History, every house and shop being sufficiently stor'd with works of that nature, and my task being onely a few directions, for the better improvement of the exercise of *sout Compnies*, the which I have hitherto endeavoured, to keep my self close unto, and not blown out into extravagant and *For eign* Discourses. Although I cannot deny but that the *scas'nable* recall,

and intermixture of *History*, would much have beautified and imbellished the *Work*, as delivering it more fragrant to the sense, and conducting, with more delectation to the benefit of the memory: but it is not my intent to raise my labours to so large a volume, nor indeed can I spend so much time from my more necessary affairs: But shall rest well contented, to leave such large labours to the abilities of the learned, who with their artfull Inventions may be able to garnish out their works with more attracting charms, whilst I in the mean time, according to the measure of my talent, prosecute my ensuing Discourses.

*Ways of  
firing to the  
flank and  
reere.*

*You may (if you please) fire to the flank and reere: your Muskettiers being in their ordinary places, on the flanks of their Pikes. Nevertheless, a securer way for the Pikes, will be to draw the Muskettiers from that flank, which is in least danger, crosse the reere of Pikemen. And this shall be the way I'll observe in this firing: The words of Command are as followeth.*

*Muskettiers, give Fire to the right and reere, placing your selves between the Pikes, and your own divisions,*



Reere.

*The direction  
for this  
firing.*

*If there be  
too many to  
wheel off to-  
gether, then  
make one in-  
tervall, or  
more, as the  
action re-  
quireth.*

*Reduction*

The Command being given (to Fire to the Reere and right flank) the outermost File of Muskettiers present to the right, and the last rank of Muskettiers present to the reere, and both give Fire: the rest of the Body, in the mean time, marching a reasonable pace: the right hand File, and left rank having fired; the File face to the left, after their File-leader; and so marcheth up between the Muskettiers of the same division, and the Pikes; the rank wheeling off to the right, and placing it self next after the reere of Pikes, and before the first rank of Muskettiers of the same division. If you please, you may make an Intervall between the Muskettiers: that so part may wheel off to the right, on the outside, and the other part wheel off to the right, and march up between the Intervall into their places. The first File and rank that presented, having given fire, and wheel'd clear off the Body, the next File and rank, present and give fire; after the same manner wheeling off, and taking their places, as aforesaid; and so successively, the rest (both files and ranks) give fire, observing the same order. And having given fire, once, twice, or often over, they are still reduced to the same they were before the firing began. Then draw your Muskettiers from the reere, to the left flank again; and they will have their places as at first.

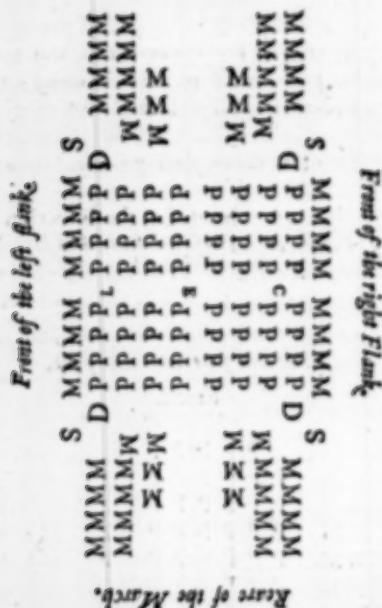
C H A P.





*Advance your Pikes and stand, Face to the right and left, Muskettiers give fire and flank your Pikes.*

*Front of the March.*



*Rear of the March.*

*The direction for this firing.*

*\* Upon some occasions it will be necessary for the Muskettiers and Pikemen to advance into the leaders ground, but then such direction will be given.*

*\* The Demi-bearse in Ch. 76.*

*\* This facing brings all the Muskettiers to the front and rear, if you would bring your Muskettiers into their first place, let them give fire and wheel off as before, which will reduce them again to the flanks.*

The Body being faced to the right and left, the foremost ranks of Muskettiers (which were the outermost Files) present and give fire, and then wheel off by division, ranking even with the foremost ranks of Pikes, and leaving sufficient Intervals for the rest of the Muskettiers to march between them and the Pikes. The next rank presenting and firing after the same manner, \* but not advancing forwards: only firing upon the same ground, and wheeling off by division; afterwards passing down between the Intervals, and so rank after their leaders. It is here withall to be noted, that they that were outermost when they gave fire, are likewise to be so when they have taken their places. If these instructions be not sufficient, turn back to the Figure of the \* *Demi-bearse*: where the manner of the execution is all one with this. All the ranks of Muskettiers having fired and wheeled off, as before; the Pikes if need be may charge, and the Muskettiers give fire over again, wheeling off outward, and placing themselves in the rear of their own divisions. \* Having advanced your Pikes, and faced your body to the first front, all your Muskettiers will be in front and rear. And then if you face your half files about, and give fire after the same manner to the front and rear, having faced them again to their first front, they will be reduced, as at first, into their ordinary square. Nevertheless, I will reduce it by another firing, which was first invented and shewed us by that worthy Citizen, and excellent Souldier, Captain Henry Waller, now deceased: It is a firing in front, the Muskettiers of the rear division, opening to the right and left, and steering up on the flanks of Pikes, untill the leaders of the rear division (who as then are the half file-leaders) rank even with the front of Pikes. The words of Direction that produce the figure, follow in the next Chapter.

## CHAP. XCIII.

Captain Wallers Triple firing to the Front.

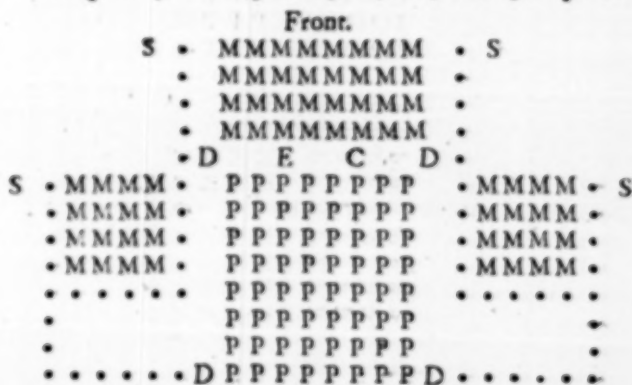
**T**His Triple firing to the Front, ha h had the approbat on of good and well experienced Souldiers, who have all acknowledged it to be both *solid* and *serviceable*: Bringing many hands to fight in very good order, the *Pikes* being securely covered by their *Muskettiers* in front, neither need they be idle in time of Battell, if they have any \* *Em-Pike men* amongst them, for that they may send their *Waistling Archery* over their *Muskettiers* heads, without offence to their Friends: though not without damage to their Enemies. I any carp at the depth of the *Muskettiers* (either in this Figure or in any other in this Book) I shall request them to suspend their censures, and wisely to conceive by a little, what a great deal meaneth. My intent not being, to make my Book monstrous, by having little leaves, and large Figures. Onely I desire with this small number to shew the nature of severall forms and figures of Battell, the manner of their firings and wheelings off, their orderly placings, and severall wayes of *reducement*: not having the least conceit to induce any to beleive, that men are able long to continue an orderly execution at 4 deep, although (sometimes for *stratagems*) they may be reduced into a lesser number. But lest by digression I too farre trespass upon your patience, I will return to shew the manner of the firing. Onely first observe the words of *Command* and *Direction*, which produce the following Figure.

\* The Bowe  
fitted to  
the Pike,  
may do good  
service:  
where the  
Souldier is  
skilfull, and  
the enemy  
comes with-  
in their dis-  
gor.

Note that  
in the fore-  
going Chap.

the Muskettiers were left in the front and rear: The direction over the Figure, Commanding the rear Squadron of Muskettiers to march up and range even with the front of Pikes; which perfects this Figure: some have mistaken, supposing I had formed this Figure with these words; Conceiving all the Muskettiers before that Command on the Flanks.

Muskettiers of the Rear, double your front of Pikes by division.



L  
Rear.

The command being given, the first rank of Muskettiers (both of front and flanks) present to the front and give fire: wheeling off to the right and left by division. The Muskettiers of the front division being wheeled off (as aforesaid) close by the flanks of their own Muskettiers, passe directly down between the intervals: and place themselves even in rank behind the Muskettiers of the rear division, which are upon the flanks. This you may perceive by the prick's that come down between the intervals: the Muskettiers also, that fired the same time on the flanks, wheel off in like manner; (the right flank to the right, the left flank to the left) marching directly down, even with the Rear rank of Pikes; and then place themselves again, even in rank with the last rank of Pikes. This done, the rest of the ranks (successively) give fire, and do the like: every rank taking his place, after the Rank which fired last before them; the other rank moving one Rank forwarder.

The direction  
on for this  
firing.

The

The Musketeers having fired once over, they are reduced again to the flanks.

The *Muskettiers* having given fire once over; and falling off according to this direction, they will be reduced to the *flank* again, as they were at first, in the former Chapter. The firing may be continued, or the Pikes may charge, at discretion of the *Commander*.

## CHAP. XCIV.

The Demic-Plinthium; being a Tripartite firing, doing execution to the Front, Rere, and right Flank.

**F**igures and forms of Battell, may be infinite: according to the judgements of the Commanders, and the various workings of the divers motions: no art nor science yeelding more content, unto the studious practitioners; none more honourable and beneficiall for the good of our Country: none more neglected, and lesse countenanced, then the practitioners of the Art Military nor none more served up in the places of their abiding, then those men this way affected. Our rich gown men, holding it as a maxime, That Souldiers (though Fortune hath been but sparing in their portions) yet they must be taxed in the Parish-Books like grounded Gentlemen. Thus much encouragement we have, for spending our money and time for our Countreys good, and this (In good time) I hope will be amended. The next firing being a firing tripartite, doth execution to the front, reare, and right flank, at one and the same time: For the use, I shall refer it to the judgement of the judicious; for the instruction, how it is to be made: The words of Command and Direction shew it, which are as followeth.

*Half ranks of the left, double your right flank by division.*

*Front proper.*

[illegible]

If this figure were doubled, having so many more ordered in the same manner on the left flank, it would be a complete form to fire to Front, Rear, and Flank.

The direction how to make this figure is in the 27. Chap.

For the *Direction*, look back to the Chapter: which treats of this *doubling*. Only remember to face the *divisions* that way which you intend they shall give fire.

For the manner of the *firing*, it is ordinary: the *formost rank* of *Muskettiers* (on each part) having *fired*, they *wheel off* to the *right*, or to the *right and left*: (according as directions shall be given) *placing themselves* in the *rears* of their *own divisions*; the *next ranks*, in the mean time, *moving forwards* into their *leaders ground*; there in like manner, *firing, wheeling off*, and *placing themselves* as *before*: the *rest of the ranks*, *successively* doing the like. This *firing* may be continued, at pleasure of the *Commander*. The *Pikemen* (as advantage may be given) in the *interim* either *porting*, or *clearing*.

charging, or sending their fallow flowers amongst the thickest of their enemies. Lastly, for reduction, face them all to their front proper, then command, half ranks that doubled, to face to the left, and so to march into their places. For further directions, turn back to Chap. 27. which shews the Reduction of the foregoing Figure, &c.

CHAP. XCV.

Of the Sconce Battell.

THE Sconce Battell is a Figure most properly fit for a whole Regiment; at least, for a larger proportion of number, then is here exprest, it neither being good nor safe to divide a small Company, into so many sub-divisions and Maniples: yet to give satisfaction unto some, I have placed it here amongst my Figures, and shewn the way, how to make it with a private Company. For the manner, or way how to fire upon it, may be divers. The Muskettiers being so placed, that they may give fire to the Front and Reere, to the Right and Left, to all four together, at the discretion of the Commander. If your Muskettiers give Fire to the Front and Reere, (every Rank making good his leaders ground) then the Figure will still continue the same. If they give fire without advancing in their leaders ground, then the Muskettiers will Rank even again with their Pikes: and the Figure will become an hollow Crosse, the Muskettiers making the Angles. The words of Command and direction which produce the Figure, are as followeth.

For if it were made with a Regiment, Brigade, or larger body, it would require other words of direction, but be nothing more difficult

Half Files of Muskettiers, face to the Reere.

That being done, Command all the Muskettiers to march to the Angles of their Pikes.

Next cause, The two first and two last Ranks of Pikes to stand.

The rest to face to the right and left, and march, untill they are clear of the other Pikes, then stand.

Lastly, command, The two first and last ranks of Pikes, which did not move, to double their Files to the right.

These words of Command and direction being executed, perfect the Figure, as followeth.

The Sconce Battell.

C

S	MMMM		MMMM	S
	MMMM		MMMM	
	MMMM		MMMM	
	MMMM	P P P P	MMMM	
		P P P P		
	D	P P P P	D	
	P P P P	P P P P	P P P P	
	P P P P	E	P P P P	
	P P P P	P P P P	P P P P	
		P P P P		
	D	P P P P	D	
	MMMM	P P P P	MMMM	
	MMMM		MMMM	
	MMMM		MMMM	
S	MMMM		MMMM	S

L

Many and severall are the Firings, which (with some little alteration) may be drawn from this Figure. Neverthelesse not to spin out time with discourse, the Firing now intended to be shewn, is to be performed to the front and reere. To which purpose, the one half (both of Muskettiers and Pikes) are to face about to the right, there presenting and giving fire: those of the right flank wheeling off to the right; the left flank to the left; and placing themselves in the Reere of their own divisions.

By subdividing & new placing some of the divisions.

P

The



The next rank still moving forwards into their leaders ground; the other ranks, successively doing the like. After this manner, the firing may be continued, and the Figure still preserved.

*Reducement.* For *reducement*. First, face them all after their proper file-leaders. Secondly, cause the front and Rear divisions of *Pikes*, to double their ranks to the left. Thirdly, command the *Pikes* of the flanks to face, in opposition; close their divisions, and then to face after their leaders. Next, command the *Muskettiers* of the front division, to face to the rear. Lastly, command the *Muskettiers* (both of front and rear) to close their divisions. And then being faced to their leader, they are perfectly reduced, as at first.

## CHAP. XCVI.

Of Firing by three Files at once; two of them standing oblique, the other direct.

The first  
marching, or  
direction is  
the Figure.

WHEN I began to treat of *Forms* and *Figures* of *Battle*, I noted all firings to be either oblique or direct; and now for satisfaction to the curious, I shall insert two or three oblique forms amongst the rest. The first whereof shall be a Firing to the Front, by drawing forth the outermost File on each flank, obliquely (or the innermost, as shall seem best to the Commander) untill the bringers up of the Files, stand even with the right and left angle-men, over the front of *Pikes*. They may also lead a file of *Muskettiers*, cross the Front of *Pikes*; when having placed and faced them (as they ought) for execution, they will stand, in manner of this following Figure.

Front.



The way to  
give fire ob-  
liquely de-  
monstrated.

The two files of *Muskettiers* which were led forth, having obliquely presented inwards, and the file drawn cross the front of *Pikes*, being presented direct Rank-wise: upon the first command, they are all to give fire together, and then to face after their bringers up; who lead their files directly into their places. This done they face to their proper front again; the other files (in the mean time) leading forth after the same manner. These having done their execution, are to return into their places: being led off by their bringers up, (as is aforesaid.) The rest of the files, after the same manner, firing and returning untill they have all given fire; and then they will be all reduced, as at first.

CHAP.

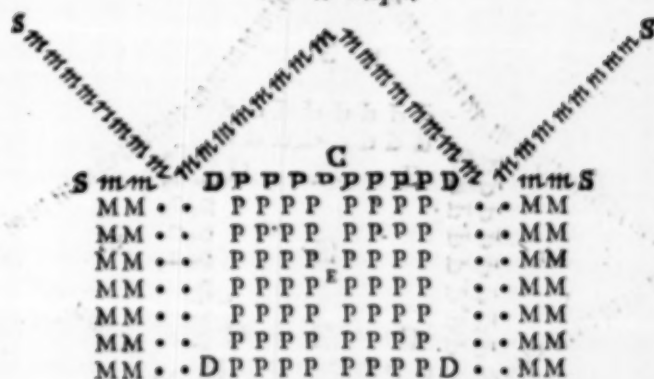
## CHAP. XCVII.

*A Firing oblique, by four files together, in form of a W.*

ALL the commendations that may be given of these oblique Figures, is, that they pour out a great deal of shot at once, and may quickly be reduced to their places. Notwithstanding they are a great weakening to the Body, if any sudden accident should happen before they are settled in their former stations. Nevertheless, I shall leave them to themselves; and if they be found to hold out weight, I shall not grudge that I have given them room amongst the rest. But if they prove too light, let them be as lightly respected, yet bear somewhat with them, for their antiquity. The way to make the figure, is as followeth. The two innermost Files of Muskettiers on each flank, march forth (each of them being led by an Officer) untill they have taken their places. Then the Officers that led forth the two middlemost Files, are to return to their places again; the Sergeants that led forth the outermost Files, standing to see them do their execution. Yet before the Muskettiers have order to give fire, observe the manner of their standing, by the following Figure.

The direction  
as to make  
the figure.

The W oblique.



L

The Muskettiers having presented according to their directions; they give fire all together; and then suddenly facing after their bringers up, march down into their places; the next two files of each flank in the interim of their marching away, are to move forwards to their ground; where they are in like manner to give fire, and then to take their places as aforesaid. The rest of the files of Muskettiers (if you have more) must then move forwards and do the like: And in this sort, may the Muskettiers give fire, once, twice, or oftner over: each firing being a redoubling to it self.

The direction  
as to give  
fire from  
this Figure.

## CHAP. XCVIII.

*Of the Fort-Battell; the way to make, and to reduce it.*

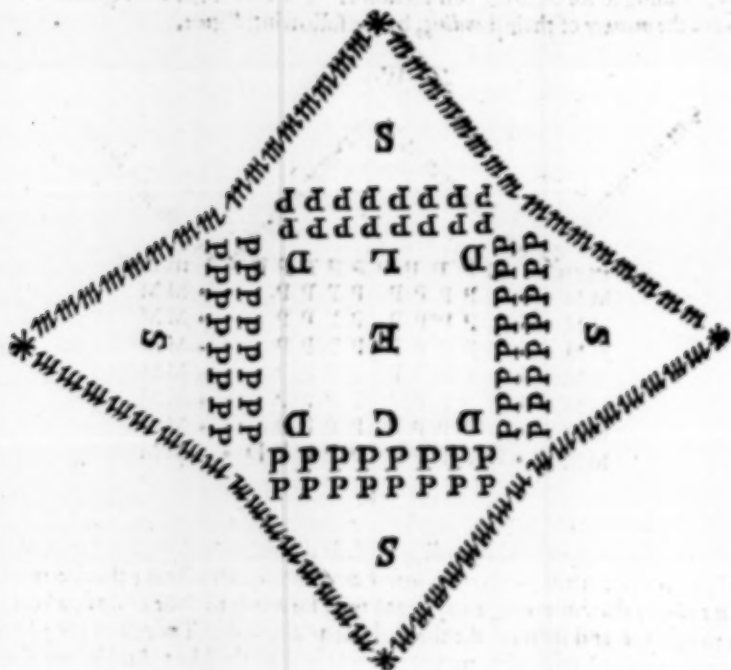
THE figure of the fort-Battell, is an oblique firing: and taketh its denomination rather from the similitude, then the strength of a Fort. Its chief use, is for the entertainment of some great personage or Commander in the Field: who being received into the midst of the division of Pikes, the Muskettiers may present and give fire altogether in one vollee. Or if they would have the Muskettiers give fire, one after another; then the volleys by succession (which some call the peal) will be the best. If there be more Muskettiers, then will serve to make up the figure single; they may also give fire with the rest, presenting obliquely between the distance of their leaders. The way to make this

The use of  
the fort-  
Battell.

The direction  
is to make  
this figure.

figure, is as followeth. First, draw forth the outmost files (of Muskettiers) on each flank, in form of an hollow wedge, before the front of Pikes. Then, cause the next two outmost files to face about; and to follow their bringers up, in the same form to the Rere. Then, let the last two files of Muskettiers (on each flank) be drawn after their file-leaders, in the same manner and form, to the flanks. The Muskettiers being thus ordered, and all presented obliquely outwards, command the two first; and two last ranks of Pikes, to stand; the rest of the Pikes, to face to the right and left: and so to march untill they are clear of the other Pikes which stand. Then, command the Pikes which moved, to double their files to the right. Lastly, command all the Pike men to face outward; each division of Pikes, after their hollow wedge of Muskettiers. Or else, let them face all inward to the Center: and then the Body will stand in form of the following Figure.

The Fort-Battell.



These things  
are to be ob-  
served stand-  
ing, the  
Muskettiers  
having given  
fire, are to  
march ready  
again in their  
places main-  
taining their  
figure.  
Reduement.

Having fired upon this figure, there is no manner of wheeling of: because the form is still to be continued. But when you come to *reduement*, first face all the Pikes to their proper front, that is, unto the place where you find the proper File-leaders. Secondly, let the Pikes which are flankers, double their ranks to the left, and so close their divisions: Then the Pikes will be reduced. For the Muskettiers; first command those that are on the flank to lead up their files in their due places, close to the Pikes: Next, command the Muskettiers of the Rere to sweep up on each flank by division: Lastly, command the Muskettiers before the front of Pike, to face after their bringers up, and to march down into their places; Lastly, facing to their leader, they are all reduced as at first.

## CHAPTER. XCIX.

*Of the cross Battell; how to make it with a private Company. The wayes to fire upon it: with other discourses, concerning the necessities inforcing that Figure: with the means to make it more defensive and serviceable: and lastly, the way to reduce it.*

**T**He cross Battell, although it must needs shew *poor* and *thin*, being here demonstrated by a number not sufficient to expresse the worth of the figure: yet hath it past the approbation, both of ancient and modern Commanders: Who (with good success) have often drawn out, the grosse of their Battells into this form: and therewith both sustained, and recharged upon their enemies. Each division being very aptly placed to relieve the other. If the enemy be like to give on in front, then the *Rear* division may sub-divide, and *march up* by each flank making the wings. But if that part be supplied by the Cavalry, then they may serve to line, or mix, between the Intervalls, and divisions of the horse; or be otherwise disposed of, at the discretion of the Commander. Nevertheless, if any object, that the enemy being in open Campains, may as well charge your Battells in flank or *Rear*, as in front. The answer may be easily given; that the Body being faced, the matter doth still continue the same.

If it be re-objected, that the enemy having the advantage in number, may seek to distress you; by charging on the severall places at once. To that may likewise be answered, that each division may readily face to that part and receive their charge.

Notwithstanding, discreet Commanders have ever been cautious, to adventure into the even, and open Countries (when the enemy hath the advantage of horse; or much the greater number of foot) whereby they may be forced to the hazard of a battell: The which without manifest necessities, or (to the contrary) since known and extraordinary advantages; ought neither to be given, or accepted: So nice and ticklish is the chance of war; where small errors, oftentimes, are the forerunners of great overthrows. But my intent is not to lanch forth into these lavish discourses, but timely to make my retreat unto my private Company, and without further circumstances, of what hath, or may be done; come so shew what I intend, concerning this figure: and shew the wayes to fire upon it; the which are ordinarily two, &c.

The first, when the Muskettiers give fire, and then place themselves in the *Rear* of their own divisions of Muskets. The second way is, after that they have fired, to place them in the *Rear* of their Pike: the Pikes maintaining the Muskettiers ground. The words of Command which produce the Figure, are as followeth.

*Two first Rank, wheel you Front into the midst.*

*Two last Rank, wheel your Rear into the midst.*

*To crest of the Body, face to the right and left: and so march, untill the Rear of the four divisions make an even hollow square.*

*Then let the Commander go into the midst, (or center) and face the whole Company to him: giving them such direction as is meet.*

*Lastly, being all faced about to the right, the body will stand like the following Figure.*

Even and open Countries very dangerous for small Bodies: where the enemy is superior in number, or horse.

The hazard of a Battell perillous.

The first placing of the Muskets. The 2. way of placing the Muskets.

The direction to make the Cross Battell with a private company, also you may observe if that the Cross Battell were to be made with a Regiment, or Regiments, even instead of wheeling two Ranks, we should perhaps wheel 2 or 3 Companies to either part, &c.

Notes that as  
men stand in  
rank, when  
they give fire,  
so they are to  
place them-  
selves again,  
when they have  
fired. The ex-  
ercise of men  
taking the out-  
er place: the  
off, in like  
manner, order  
by placing  
themselves  
within them.









## CHAP. CII.

Of the Ancient manner of the Imbattailing the Plinthum: the placing of each Armes, and the use of the Figure.

**T**HE Plinthum, anciently used amongst the Grecians: was an even, square sided (or square-fronted) Battell. The middle part thereof, being commonly hollow: on the outflanks, always marches the heavy armed, the light and nimble armed slingers, darters, and archers being more securely placed in the midst.

Notwithstanding it took denomination from the forme, and not from the placing of the Armes: (For example) *Eumenes* having sent for his *Elephants*, to their wintering stations: *Antigonus*, thought to take them by surprise, and to that purpose sent 1300 *Spear-men* and *Tarantines*, withall his light armed *Foot*; who overtaking them upon the way, &c. The Commanders of the *Elephants*, ordered the *Beasts* into the *Plinthum*: casting all their Carriage into the midst. And indeed it was a figure, commonly taken up in times of necessity, when the adverse party was much the abler in horse. And to that purpose, was it framed by *Tymotheus the Athenian*, *Brifides the Lacedemonian*, *Bardilis the Ilirian*, and many others. Being usefull, and necessary, as well in time of Battell, as in march, at both times for the security of the Carriage, and the defence of the sick and wounded. Much like unto this is our hollow square-fronted Battell: which may well retain the same name, although sometimes differing in the placing of our armes. For if it should so happen (as it often doth) that a charge be given in *Front*, *Rear*, and *Flanks* at one and the same time: than I conceive this ensuing Figure, very apt for defence, for that the *Muskettiers* and *Pikes* are so placed, that each armes may be aiding and assisting to the other. For seeing that neither *Muskettiers* nor *Pikemen* alone, can bee singly sufficient of themselves, to withstand the able and resolute *Horseman*, (without great advantage of ground) on the contrary, the *Muskettiers* and *Pikes* being conjoynd into one body, and being well ordered, they are not onely able to defend themselves against their fury, but also to put them to the worst. Yet this must not be understood, of raw and unskillfull *Souldiers*, whose ignorance is cause of diffidence; but of hardy, experienced, and well exercised men, such as know well how to demeanage themselves courageously in time of Fight.

The words of Command and *Divells* which produce the Figure, are as followeth.

Halfes files of *Pikes*, face to the *Rear*, and march untill they are cleave of the last ranks of *Muskettiers*.

Secondly, command,

Halfes files of *Muskettiers*, face to the right and left, (then) march between the divisions of *Pikes*.

Thirdly, command,

Left halfes ranks, of the first division of *Muskets*; face to the *Rear*, and march between the *Rear* divisions of *Pikes*.

Lastly, Having evened their ranks, strained their files, and closed their divisions to an equal distance, and being rightly faced; the body will stand like the following Figure.

Eudamus: The Elephants were ordered into a hollow square by Eudamus their Commander. Sir Walter Rawl Hist. mund. l. 4. c. 4. self. 4. as also in The Tattler of a. Ellen. 1. the Notes of the 4. Chap. Plinthum is a hollow square-fronted Battell, being directed Angles. \* Unless the Muskettiers had halfe Pikes, and were bound to use them. Note that all the Muskettiers must be in the midst, & the Pikes on flanks when you begin to make this figure. If your Muskettiers be on the flank when you make it, then the cross will be Pikes, and the Angles Muskettiers. &c

## The Plinthyum, or four-fronted Battell.

Front proper.

Front of the left flank.	P P P P P	D M M M M S	P P P P	Front of the right flank.
	P P P P P	M M M M	P P P P	
	P P P P P	M M M M	P P P P	
	P P P P P	M M M M	P P P P	
	M M M M M	C	M M M M M	
	M M M M M	E	M M M M M	
	M M M M M	T	M M M M M	
	M M M M M		M M M M M	
	M M M M M		M M M M M	
	M M M M M		M M M M M	
Front of the Rear.	d d d d	W W W W	P P P P	
	d d d d	W W W W	P P P P	
	d d d d	W W W W	P P P P	
	d d d d	S M M M M D	P P P P	

First Plinthyum is a hollow square. Battell fronted four waies, the number equal in length and depth. Another kind of Plinthyum is to have the depth exceeds the length; the eight armes to be placed in the midst of the hollow part. See the Tactick of Elian, the second Booke, the notes of the 41. Chapter. The reduction of the Plinthyum in to the solid square, flank'd with Pikes. The perfect redemption.

The manner of the firing may easily be apprehended by the figure; the Muskettiers giving fire in ranks, and wheeling all off to the right, doe then passe downe their Interwaies, under the favour of their Pikes; placing themselves in the Reere of their own divisions of Muskettiers; the Pikes charging at discretion. Having fired once, twice, or oftner over, and still maintaining the same ground, the Figure will continue to be the same.

If the reere part of the Battell was by any means secured; so that you need give fire but three waies, then the front half-files of Muskettiers might have been preserved intire.

This Plinthyum, or four-fronted Battell, may as well be made with the Muskettiers in the Angles: the Pikes making the Crosse; this kind of Command alwaies making the Crosse, of the Armes in the midst of the Battell.

After that you have given fire at discretion upon this Figure, and charged your Pikes, if you would reduce them to the first square, command the whole Body to face to the front proper.

Secondly, command the Muskettiers in the Reere to march up on the left of the Muskettiers in Front: the Pikes being first opened, to give them place.

Thirdly, cause the Muskettiers in flank, to face inward: and to close their Divisions.

Lastly, cause the Pikes to march up; placing themselves right after their Leaders.

This being done, the Body will be brought againe into a solid square, flank'd with Pikes. I forbear further to reduce them untill I shew the next figure. Yet for further satisfaction to any that shall require it: command your Muskettiers to face to the right and left outward; the Pikes to face inward, and so to interchange ground; and then being rightly faced they are reduced.

## CHAP. CIII.

Another hollow square for March.

Sundry formes there be which goe under the denomination of the hollow square, and very diversly they may be framed. Some are hollow, impall'd with Pikes; the Pikes againe, girdled with Shot: Other squares are made with shot, and they impall'd with Pikes. Some againe, with divisions of Muskettiers and Pikes orderly mixt with an hollow in the midst. A fourth sort is when each Armes are divided by themselves: as when the Pikes make the front and reere, and the Muskettiers the wing. A fifth way is, when the Muskettiers lead in front and reere, and the Pikes make both the Flankes. All these waies are very necessary and usefull, as the time, occasion.

casion, or place shall give cause; or the judgement of the Commander shall see fitting. Nevertheless the *Hollow Battel*, which I now intend to demonstrate unto you, is especially usefull for a march: whereby to secure the carriage, as likewise to preserve the sicke and wounded; it may also serve for the Commander to consult with his Officers, or to make any Speech or Oration to the Souldiers. Or the *Ensigne* may in signe of triumph, display his Colours in the midst upon a march after *Skirmiss*. As it now is the Custom after exercise.

The way to make this figure (the *Muskettiers* being in the midst) is as followeth. First, to command the *Halfe files of Muskettiers, to face to the Rear*:

Then Command all the *Muskettiers* to march, and the *Pikes* to stand.

When they are cleere of the front and rear of the *Pikes*, let them stand, and face all to the Front proper: and it produceth this following Figure.



L

If the *Firing* be onely intended to the front: then Command the *Muskettiers* of the *Rear*—The division, to open to the *Right* and *Left*, and to sleeve up on the outside of the *Pikes*, there present on to this time and firing at the same instant, with the *Muskettiers* of the *Van*: each part wheeling off, firing, and placing themselves in the *Rear* of their owne divisions. This firing doth conceive the *rear* to be by some meanes secured. But if you presuppose a *Charge* to be given to the front and rear marching. It may be retailed (or acquitted) still continuing the march. Nevertheless the insolence of the *Enemy* will scarce be repelled, or abated; without an *Ali*, and facing about to the *Rear*—half-files. The which being performed, the *Muskettiers* are to present and give fire, wheeling off by division, and placing themselves in the rear of their owne divisions of *Muskettiers*; each rank moving forward into their leaders ground, and doing the like. If you should give fire, and not move forwards into your leaders ground: then the *Muskettiers* would fill the hollow in the midst betweene the *Pikes*. Nevertheless, suppose the Figure still to continue to be the same. Because I will now come to the *Reducement*: and the rather, for that I have not done it since I began with the *Hollow-fronted Crosse*. But now (so please you) I will reduce all by a firing. And to that end, first, close your divisions of *Pikes*; and then the *Muskettiers* will bee all in the front and rear. The reduction by a firing, the which is not exprest in this place: it is in Ch. 83.

Q 2

Secondly,



Secondly, cause the *half-files* (both *Muskettiers* and *Pikes*) to *face* to the *Rear*. Then cause the *Muskettiers* (both of *Front* and *Rear*) to give fire, wheeling off by division, and flanking their *pikes*. When they have fired all over, the *Pikes* may charge: who being againe advanced, and all faced to the front proper, they are all reduced (as at first) into the ordinary *Square*, flanked with *Muskets*.

## CHAP. CIV.

Of the *Hearse Battell*, and of the hollow *Hearse*, and *Crosse*.

Talksick  
cap. 30.  
The use of  
the *Hearse*.

If it were  
not for these  
impediments,  
it were bet-  
ter to march  
in forme of  
*Battell*; with  
the front ex-  
tended at  
length.  
The *Hearse*  
*Battell* of all  
other, the  
weakest for  
fight.

The *Hearse Battell*, by the *Greeks* called *Orthobalanx*, (as in *Elia*) Is when the depth, doth manifold exceed the length, thrice at the least. As when our *Companies* march forth by right *inductions* (or in successive divisions.) It is a figure, especially usefull for *March*, because that upon those occasions, a *Body* drawne out in length would meet with many lets and impediments: by reason of the variety of grounds, and other accidents, the which they must comply withall in their way. Sometimes incountring with woods and bushes, sometimes with hills and straights, sometimes with rivers, bridges, ditches, pits, quagmires, and many other the like inconveniences: which would quite breake the order, and array, of any other figure, having the length more extended. This forme is also held the best for *march* in the night; because the range (or *breadth*) not being long, the order may be the better preserved, and the march performed with more silence. But of all other, it is the weakest, bringing but few hands to fight: and hath seldome or never been used, by any good *Commander*, unless it were upon necessity. It may be made either solid or hollow, and being conjoynd to the *crosse*, may prove more serviceable, especially for the security of the *Carriage*.

True it is, that were the forme farre more strong, yet being demonstrated, by so small a number, might well render it suspected: seeing the worth thereof (by reason of the *thinnesse*) could not so evidently appeare, as otherwise it would, were the number larger.

But I have onely taken upon me to shew the severall formes and Figures of *Battell*, which may be formed and practised by a private *Company*: as having limited my selfe, not to exceed the number of 128 men. Wherefore my request must bee, that the courteous Reader when hee shall finde that any figure for want of number looks thinn, (or poore) he will there be pleased to cloath it in a larger number: for that thereby the *Battell* will appeare the more solid, and the beholder become the better satisfied.

This figure  
is for a con-  
voy.

This Figure may in like manner be usefull for a *Convoy*: the hollow parts thereof, being very commodious to secure the *Carriage*: the men also are very well disposed to help and assist each other, in whatsoever part it should happen them to be assailed.

The words of *Command* and *Direction* which produce the Figure, are as follow.

Whole *Front* and *Rear* into the left flanke.

The direction  
to make  
this figure  
with a pri-  
vate company

That done, face them as before, and the *Muskettiers* will be in front, midst, and rear.

Next, open the *Muskettiers* in the midst, to the right, and left, and cause them to double their *Ranks* to the left.

Then cause the front *half-files* of the front division of *Pikes*, to open to the right and left: and the rear *half-files* of the rear division of *Pikes* to doe the like.

Then, having evened their *Ranks*, and straightened their files, and being faced to their Leader, the *Body* will stand in forme, like this ensuing Figure.

The below Hearts and Croffe.

C  
 MMMM  
 MMMM  
 MMMM S  
 MMMM  
 PP D PP  
 PP Van PP  
 PP Carriage PP  
 PP PP  
 S P P P P S  
 P P P P  
 P P P P  
 P P P P  
 P P P P  
 PP Rerre PP  
 PP Carriage PP  
 PP D PP  
 MMMM  
 MMMM  
 S MMMM  
 MMMM  
 L

If to be, you will give fire upon this Figure, you may doe The direction it any way, or every way. If you give fire to the front, reerre, on to this and flanks; then let your Muskettiers, wheele all off to the firing, right, and place themselves in the reerre of their owne divisions. If you would still preserve the Figure, then let every ranke (before they give fire) march up into their leaders ground.

Having either marched or skirmished, in this forme; before I come to the Reducement, I will drawe one other on to make the figure from it: the which I conceive with some small addition would prove very serviceable, even for a pitch field, were the number proportionable. The Directions to make this Figure, are as followeth.

First, Command the Van to make Als. Secondly, Command the Croffe (being the Bastell) to serve up on the Left. Thirdly, Command the Rerre to serve up, to the Left of the Bastell. The Muskettiers of the Rerre, still moving forwards, untill they stand even Ranged with the Muskettiers of the Van. This being rightly performed, produceth this following Figure.

S MMMM Front. MMMMS  
 MMMM  
 MMMM  
 C  
 D P P M M M M P P D P P P P D  
 P P P P  
 P P P P  
 P P P P  
 P P P P  
 P P S M M M M P P P P M M M M S  
 P P P P M M M M  
 P P P P M M M M  
 P P P P M M M M  
 E  
 P P P P  
 P P P P  
 P P P P  
 P P P P  
 L  
 Bastell. Q T

*This Figure* although here demonstrated by the number of a *single Company*; yet carrieth the port of a *Regiment*. Borrowing the denominations of *Van*, *Battell*, and *Rear*; and may at the direction of the *Captaine* (or other *Commander*) bee so ordered; and the firing performed accordingly. The *Van*, and *Rear*, making the *Wings*, may send forth *loose files*, to begin the *Skirmish*. Secondly, they may give fire even *abreast*. Thirdly, the *Battell*, slowly advancing, may give fire at discretion. Upon all these firings, the *Muskettiers*, are to wheele off to the *Right*, or to the *right and Left*, taking their place, according as direction shall be given. Lastly, to come to the *Reduement*. First, march forth the *Van* the *Battell*, and the *Rear*, falling successively into their *places*. Secondly, command the *Pikes* of the *Van* and *Rear*, to face inwards, and close their divisions. This being performed, cause the *Muskettiers* of the *Battell*, to double the files to their right; and in like manner to face and close their divisions. Lastly, wheele *Front* and *Rear* into the right *Flank*; which being done, and the whole body againe faced so the *Front* proper; all will bee reduced as at the first.

*The Reduement*. Making again the hollow horse and cross.

## CHAP. CV.

Of the hollow Square girdled with shot.

*The Hollow Square, girdled with shot*, is a figure to be used in times of necessity, when as the *Commander* well foreseeing he shall bee enforced to fight (with great disproportion of number) hee therefore wisely and timely takes the benefit of some *advantageous ground*: thereon speedily drawing forth, and imbattelling his Army into this forme. And that nothing may be wanting, or through neglect exposed to danger, the which by any means may bee secured, all the carriage (which otherwise would not prove serviceable, and available for the better strengthening, and fortifying some part or other of the *Battell*) should be safely placed in the midst. And lest the adverse part taking advantage to breake in at any the spaces between the *Angles*, should thereby breed confusion, or break their array; they are suddenly to impale those parts which offer themselves as *weakest* (and least defensible) with sharpe pointed *Pallisadoes*. A weapon, which hath sometimes beene used by our *English Bowmen*, with good success against the *French*; and now of late in our owne time, by that worthy Hero, and Prince of matchlesse memory, *Gustavus Adolphus King of Sweden*, in his warres of *Pole*, and *Germany*, joyning the *Swines feather* with the *Musket*, as a reasonable defence against the incursions of the *Horse*. The use of which weapon is now practised and taught here amongst us: by that worthy Gentleman, and expert Souldier, *Captaine Henry Tüller*.

But to returne: those parts which lye most open to the fury of the *Enemies Horse*, ought to bee impaled with *pallisadoes* (or *swines feathers*) as aforesaid: or if those kind of weapons be wanting, then supply that defect, by speedy casting up a *rampart* or *breastworke*, of earth in each needfull place. Nevertheless if time permit not, or that the ground be not *seafable*, then the *Whegs*, *Carts*, and other *Carriages*, may be so orderly placed, that of themselves they may be sufficient, to fortifie and defend those places, which otherwise would lye too open to the invasion of the *Cavalry*.

*This Figure*, may be as well made with the *Pikes* foremost: but because that the *Muskettiers* may more commodiously fight before their *Pikes*, and with lesse danger to their own bodies, therefore I conceive it fittest at first to place them in front of their *Pikes*. And if the enemy shall too hotly presse them with his *Horse*; then at the discretion of the *Commander*, they may safely retreat behind their *Pikes*; the *Pikesmen* making good the ground of the *Muskettiers*. For better satisfaction, observe the direction to make the following *Figure*. First, command a *Serjeant* to draw forth all the





*A third way  
of firing on  
this Figure. Last  
rank.*

*The reduction.*

*A second  
way of re-  
ducement.*

withstanding, if the *enemies horse* shall still *press forwards*; and with their *foot* shall continue to annoy the *body* (the *pikes* on this *figure* being especially *defensive*;) then cause the *Pikemen* to charge at the *foot*, and your *Muskettiers* to give *fire* over them: according to former direction. After this manner, the *battell* may be continued to the *rears* of your *Pikes*; and if you bee minded to reduce them into the first *orderly square*, this is one way for it. *Pass* through your *Muskettiers* before your *front* of *Pikes*, as they were before the *firing*: that being done, let the *Commander* face the *whole body* to the *left Angle*, of the *front division*, by which meanes hee shall there find the *halfe* of his *file leaders*. This being performed, let them *march*: and so *even* their *ranks* and *straite* their *files*; the *rears division* of *Muskettiers* and *Pikes*, orderly following after the *front division* of the like *Armes*. After this, let the *halfe-files* which then are (which indeed are the *residue* of the *file-leaders*) double their *ranks forwards* to the *left*: which being performed, the *men* are reduced as at first.

If you would reduce them some other way, without passing through your *Muskettiers* (as I have formerly said) then first let the *whole body* face to the *left Angle* of the *front division*; and march, evening their *ranks* and *files*, as aforesaid. Which being done, cause the *halfe-files*, (which then are) to double their *front* to the *left*; which being in like manner performed, all your *Muskettiers* are still in the *midst*. Your next worke, is, to cause your *Muskettiers* to face to the *right* and *left outward*; and your *Pikes*, contrariwise, to face *inward*; and so to *pass* through, and interchange ground. Thus being faced to their *front proper*, they will bee reduced, as at first.

If any will be practising of this forme of *battell*, with a smaller number of men (as with 64. or fewer) whereby they will be constrained to double their *halfe-files*, then they will be reduced the same way: onely they shall not need to double their *halfe-files* againe, in their reduction: as they must needs doe, were the number larger.

## CHAP. CVI.

*Of the so'lid Square, with Muskettiers in Center and Angles. The way to make the Figure with a private Company: how to fire upon it, and to reduce it.*

INfinite are the formes and Figures of Battell, which may be made: yet all differing, either in circumstance or matter. Some of them are Solliid, others Hollow: some of them, being *Trines*, *Squares*, *Hearses*, *Cirtes*, *Crosses*, *Crosses*, *Diamonds*, *Plinthiums*, *Plasiums*, *Paramikes*, and infinite others. Some of them taking their denomination from the nature of their numbers. Others according to the placing of each *Armes*. A third sort, taking their names from things they most resemble, all of them being necessary to be known, to such which would be accounted skillfull. \* *Serjeant Majors*: that so with all numbers, upon all occasions, they may readily bring their *Souldiers* into any forme or figure of battell (according as the time, the number, and place will give them leave) for opposition either of horse or foot, or of both conjoynd.

\* *Majors* ought to be of singular skill and experience that so they may at all times be able (having observed the situation and place) to draw their men into formes most advantageous to themselves, and offensive to their enemies. \* This kind of practise and meditation; an excellent means to make men expert in this Military trade. Our debaish roaring valble, (who assume onely the habit of Souldiers to make themselves to be such) never spend their times after this worthy and vertuous manner. Nor indeed hath any attained to be eminent in this Military way, whose ends and aimes have bene base and covetous; But such, and onely such, whose love of vertus hath induced to imp their wings with the plumes of honour.

Excellent was the Custome of that worthy *Philopemen* the *Achaian*, who when he walked or travelled abroad with his friends and familiars, would marke and peruse the situation of the Cuntry about him: and so contrive and discourse to his companions, that if it so happened an army to march that way, Then he supposing to have under his \* command such a number of *Souldiers*, ordered and appointed in such a manner, and marching towards such a place; where being upon such a ground encountred, by the greater and better prepared

men into formes most advantageous to themselves, and offensive to their enemies. \* This kind of practise and meditation; an excellent means to make men expert in this Military trade. Our debaish roaring valble, (who assume onely the habit of Souldiers to make themselves to be such) never spend their times after this worthy and vertuous manner. Nor indeed hath any attained to be eminent in this Military way, whose ends and aimes have bene base and covetous; But such, and onely such, whose love of vertus hath induced to imp their wings with the plumes of honour.

Agay,



Army: Then would he put the question; whether it were fit for him to hold on his way, retire, or make an *Alt*: what *piece of ground*, were meetest for him to *lie on*, and in what manner best to do it; in what *forme to order his men*, and how and in what numbers to place each *Armes*, where to *bestow his carriage*, and under what *guard to leave them*. Next would hee propound, if that the *enemy* were for the present *beat off*. then how with the most *conveniency to encampe that night*, which way, and in what manner, were his best to march the next day: by these and suchlike continuall discourses and meditations, hee was growne so *exact and perfect*, that hee never met with any difficulty, whence he could not explicate himselfe and followers.

Now after so large a digression, returne we back to our *single company*, the work of this *Chapter*, being to shew the *Plesium*, or *long square*. In which the *Muskettiers* are *halfe* in the midst of the *Pikes*, and the other half equally *divided*, and placed on the *four Angles* of the *battell*: the *Pikes* making *four divisions*; as being placed upon the *front, reere, and flanks*. But not to hold you with longer circumstance, take these words of *command and direction*, which produce the following *Figure*.

The Command is, *Four middle-most ranks of Muskettiers and Pikes interchange ground.*

For further direction, cause the *four middle ranks of Muskettiers* to *face to the right and left inward*.

That done, Cause the *four middle-ranks of pikes* to *face to the right and left outward*; then let them move and *interchange their places*. This done, and *faced to the first front* produceth the ensuing *Figure*.

## The Plesium.

E C

S	M	M	M	M	P	P	P	P	P	P	P	M	M	M	M	S
M	M	M	M	M	P	P	P	P	P	P	P	M	M	M	M	M
P	P	P	P	M	M	M	M	M	M	M	M	P	P	P	P	P
P	P	P	P	M	M	M	M	M	M	M	M	P	P	P	P	P
P	P	P	P	M	M	M	M	M	M	M	M	P	P	P	P	P
M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	M
S	M	M	M	M	P	P	P	P	P	P	P	M	M	M	M	S

L

If you would *give fire* upon this *Figure*, it may be performed either to the *front and reere*, to the *right and left*, or to *all four* together. But which way soever the *firing* be, let the *Assault* of the *Muskettiers* in the midst, be turned the same way, and cause the *Pikes* which stand before them, to charge at the *foot*, and the *Muskettiers* in the Center to give fire over them. The *first rank* having fired, let them *kneele* (or *crouch low*) upon the ground; making ready againe: whilest the next *ranks* behind them *give fire*, and doe the like; and so forwards for the rest. Having all *fired* once over this way, let them rise up (and if need be) *give fire* over againe, after the same manner. The *Muskettiers* on the *Angles* (in the interim) *giving fire*, after the ordinary way, *wheeling off*, and falling in the *reere* of the *Muskettiers* of their own divisions, the others in the meantime *moving forwards*, and making good their *leaders ground*. This being done, and the *Pikes* *avenged*; the *Figure* will still continue to be the same, without alteration. And that as well in *men*, as *matter*: if so be the *firing* be performed, according to the former direction, either in the *Booke* or *Margin*.

For Reducement, command the *four middle-most ranks of Muskettiers and Pikes* to *inter-*

R

change

\*The Muskettiers in the midst of the Battell, may give fire by ex- traduction, which will be a better way, then to give fire over the Pikes heads.

The reduc-

change ground; and they will be reduced as at the first.

It this be not plaine enough, observe these following directions. *Muskettiers of the middle division face to the right and left outward; likes of the flanke divisions face to the right and left inwards: this done let them move into each others places, and face to the front proper, and they are rightly reduced.*

CHAP. CVII.

*Of the double crosse Battell, and severall other formes from thence proceeding.*

I Shall now proceed to shew some formes, for the *Imbattelling* of larger numbers. It being one of the most principall parts of the *Art Military*, to *Arrange* your Battels into such formes as may bring most hands to fight with conveniency: so that one part of your Battell doe not cumber or hinder the other. But by their orderly placing they may bee aiding and assisting to each other. Appointing to every part, *maniple*, or *division*, their due number: what order they are to keep, when and how they shall fall on, that so there may be no disturbance in time of fight: Therefore in the ordering of your Battels, you ought to be carefull of what may happen by casualty or chance of fortune: that so by timely foresight you may provide remedies.

Especially take notice, that you alwaies have reserves ready, both of horse and foot, (if you have them in the field) that so by their timely assistance, the broken, and distressed parts of the Battell may be upheld and relieved.

\* For many times it so happeneth that such a reserve may bee an especiall cause to gaine a victory, the want thereof (to the contrary) may be a meane to hazard the losse of all. Of this you may read examples enough in all *Histories*, both *Ancient* and *Moderne*. But I forbear to wade further into these discourses, and therefore returne to the worke of the Chapter.

Some Commanders have *Ranged* their *Armies* into one onely Battell without either wing or reserve: some into two, others into three, some into four, some into five, some sixe, seven, eight, nine, and some into more. Now although that this small number that I have pitched on, be not sufficient to demonstrate the Figures to perfectly (when they are divided into many parts) as larger numbers would make them appeare, yet except of them as they bee. For I have purposely chosen so small a number: that such *Captaines* and *Gentlemen* as please, may make use of them in their practice. The *Command Direction*, and *Figure* followeth.

The *Command* is, *Muskettiers* march (untill your halfe files range even with the Front of Pikes, then) stand.

*Halfe-files* (of each *Armes*) face outward, and march (untill you are cleere of the Angles of your owne *Armes*, then) stand: face all to your leader.

Front.

If this firing were to the front and rear, then the two last divisions of Pikes may be Muskettiers, the Pikes placed even with the rear Angles of the Muskettiers in the front.

S M M M M		M M M M S
M M M M		M M M M
M M M M		M M M M
M M M M	G	M M M M
	D E D	
M M M M S	P P P P P P P	S M M M M
M M M M	P P P P P P P	M M M M
M M M M	P P P P P P P	M M M M
M M M M	P P P P P P P	M M M M
	D P P P P	P P P P D
	P P P P	P P P P
	P P P P	P P P P
	P P P P	P P P P
	L	

Rear.

Your

Your *Body* being drawne into this *forme*; it stands aptly for *firings in front*: but may very fitly serve for to give fire to the *front*, and *both flanks*. If you would fire to the *front* and preserve your *Figure*; then the *Muskettiers* must move forwards, into their *leaders ground*. If you please you may move forwards your *Reere divisions of Muskettiers*, and make *wings* of them, to beginne the *skirmish*: having fired once or twice over they may retreat into their places, and then the *front divisions* may entertaine the *skirmish*, and fire two or three times over. The *Reere divisions* may also give fire with them, at discretion of the Commander. The *Pikes* in the meane time, are to advance, move forwards, *port, charge, stand, retreat*, all according to the direction of their Command, or beat of the *Drum*.

If you would give fire, to the *front*, and *both flanks*, at one and the same time: then the *front divisions*, both of *Muskettiers* and *Pike* keep their *Aspells*, and give fire to the *front*. The *Reere divisions*, as well *Muskettiers* as *Pikes*, face to the *right and left*, firing to the *flanks*. If they give fire, moving forwards into their *leaders ground*, then they continue the *Figure*. And if the Commander thinke fit, the *front divisions* may move forwards, and maintain their *leaders ground*: (the *reer divisions of Muskettiers*) giving fire upon the ground they stand, *heeling off to the right* (or to the *right and left*) placing themselves in the *Reere* of their owne *divisions of Muskettiers*, the *Pikes* may *Port*, and charge at the discretion of the Commander. If this be observed, it produceth this following *Figure*.

Front.

S	M	M	M	M					M	M	M	M	S
	M	M	M	M						M	M	M	
	M	M	M	M						M	M	M	
	M	M	M	M		E	C			M	M	M	
	M	M	M	M	D	P	P	P	P	P	P	P	D
	M	M	M	M		P	P	P	P	P	P	P	
	M	M	M	M		P	P	P	P	P	P	P	
	M	M	M	M	D	P	P	P	P	P	P	P	D
	P	P	P	P									
	P	P	P	P		L							
	P	P	P	P									
	P	P	P	P									
S													S

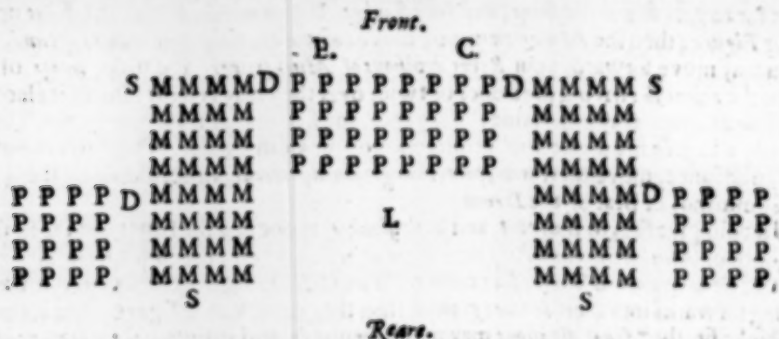
Reere.

If you will give fire on this *Figure*, it is to the *Front*, having fired once or twice over, the *front division of Pikes*, may move forwards, *porting* untill they *Range* even with the *front* of the *Muskettiers*, and there charge their *Pikes*. The *Muskettiers* still continuing their firing. The *Reere divisions of Pikes*, in the meane time, facing to the *right and left outward*, and *fleeving* upon the *flanks* of the *reere division of Muskettiers*: there in like manner charging their *Pikes*, either to the *front* or *flanks*, according to direction; which produceth this following *Figure*.

\* If you would make this *Figure*, from the *Square* (of *Pikes* flanked with *Muskettiers*; it is no more but) Command *Halfe files of Pikes*, face to the *right and left outward*, and *passe* this *Figure* through to the *flanks* of your *Muskettiers*, (then) *stand*, and face to your *Leader*.

R 2

Front,



I cannot stand to enlarge my selfe upon every *figure*, to shew the severall *firings* that may be produced from them : let it now suffice that I demonstrate the *Figure*; and give directions how to make and reduce them : any ingenious Reader that hath well perused my Booke, must needs (by this time) be able to conceive the severall waies and *firings*, that each *figure* may produce, almost at first sight. And therefore I will spare the paines, and come to the *reducement* of this *figure*, lest the Chapter prove too long. Having given fire upon this *figure*, either to the *Front* or *Rear*, or to both together, and the whole *Body* againe faced to the proper *front*, \* Command the outmost divisions of *Pikes* to face to the right and left inward, and passe through the *Muskettiers* into their places : then face to the front, and all is *Reduced*.

\* Reduce-  
ment.

### CHAP. CVIII.

*Why it is necessary to know variety of forms : The way to make foure severall figures, demonstrated in this Chapter, with their Reducements.*

\* He that  
shall alwaies  
accommodate  
himselfe unto  
one forme  
of battell,  
gives his ene-  
my too  
much ad-  
vantage.  
\* Every  
company  
ought to be  
two parts  
front, the  
third part  
Pikes.  
The Divi-  
sion to  
make this  
forme with  
a single  
company.

**H**EE that will Range his Battalions alwaies into one forme, may be likened to that *Physician*, or *Chirurgion*; that for all sicknesses or sores, hath the selfe-same posion or plaster. Not considering, that time, number, place, quality of armes, and many other like respects, will bee great sticklers in the ordering of Armies. Moreover the number of the enemy his exceeding; either in horse or foot, the placing of his Ordnance, the order of his Array; any of these, or other such like, may induce the politicke and wise Commander sometimes to alter, and vary his forme, as may be most advantageous for himselfe, and prejudiciall to his enemy. But proceed we to the figures of this Chapter, the which may be done, either by a single Company Regiment, or Army. \* Nevertheless, although I have no more divisions of shot in my Figures yet if you have numbers sufficient to imbatell, then place more divisions of *Muskettiers* in the wings, front, flanks, rear, or any other needfull part, as I have demonstrated by little Printed Squares : so much for the generall. Come we now to the particular directions for this following Figure.

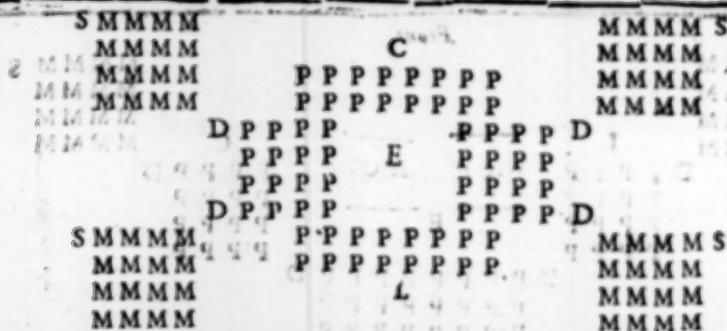
*Front halfe-files, face to the right and left, March till your Pikes range even with the Muskets of the Rear halfe files (then) stand, and face to your Leader.*

*Halfe files of Muskettiers face to the Rear (that done) Muskettiers (both of front and rear division) March to the Angles of your Pikes (then) stand, and face all to your Leader, or proper Front.*

*From*







If you would *skimish* on this figure, the Muskettiers are so placed, that they may give fire any way: the divisions of *Pikes* in like manner, either in single *Bodies*, or three of them a *breast*, may move forwards into the *Front*, or if occasion be into the *Rear*, *porting*, and *charging* at discretion. Having *marched or fired*, (or both) in this forme: if you please, we will proceed to another. The words of *Command*, and *Direction*, are as followeth.

\* *Direction* \* The two flank divisions (of *Pikes*) open to the right and left, till you stand close of your Muskettiers. (Secondly,) two *Rear* Divisions of Muskettiers, move forwards into the places of the *Pikes* that removed. (Thirdly,) two *Front* divisions of Muskettiers move forward, till you be close of the front of *Pikes*. This done, open the two last Ranks of the first divisions of Muskettiers to the right and left, which presents this following Figure.



When you peruse this figure, straight it not because of the thinness of the numbers in each part. But conceive that where two Ranks are placed single, there for service. peradventure two Companies (or more) may be drawne up, and so answerable for each other part, according to the number and ground. When you give fire upon this figure, whether with a single Company, or more conjoyned, it may be in a *Regimental* way. The *Pikes* stand ready ordered, if need be, to relieve the Muskettiers. But come we now to the *Reduction* of our Company againe to their first order, wherewith we will conclude this Chapter.

*Reduction.* Two last Ranks (of the wings) of Muskettiers, close your divisions. Rear divisions of Muskettiers, move forwards, and close your divisions, after the Muskettiers in the front. Two first ranks of *Pikes*, close

close back to the two Ranks in the Rear. Flacke divisions of Pikes, face inward, and close your Divisions. Lastly, Command, Pikes move forwards and even your front of Muskettiers. If there be any Intervals (or Divisions) in the flanks, Close them, and all is Reduced as at the first.

## CHAP. CIX.

*The Trained Bands, one of the three maine strengths of this Land; the waies to make them perfect Souldiers in the handling their Armes: The Checker Battell, with severall other formes, either for a Company, or Regiment.*

IT was the Spartan glory, being demanded of her wailles: to present a glosse of Military bodies. Wherewith they not onely for many Ages defended themselves: but raised their fame to so high a pitch, that they became Terrible to others. Out Inland with Sparta, hath no other Forts, Fastnesse, or Fortifications, to withstand the Enemy, save cur (I would I might have said Experimented) Souldiers breasts. Take a Survey of the whole, and you shall see, that the strength of our Land (like the Roman Legions) consists of our \* *Hastati, Principi, and Triarii.* \* *Tooke, be Legend of Britimart.*  
 Our Sea-men in their Wooden Forts, and Castles. Our Rocks, Shelves, and Sirtes, that lye along our Coasts. And our Trained Bands on the Land; our last refuge, and Chief Bulwarke of Defence. Now considering the facility of the two former, how carefully ought we to looke to the later: That our Souldiers be often practised and taught their Postures, and well handling of their Armes: That there be places provided for the \* *Muskettiers* to shoot Bullets at the mark, \* *Many of the Trained Bands dare not shoot a Bullet for want of practice. And very few know, what proportion of powder is to give the due charge.* (and prizes for them that doe best.) That there be places appointed for some Squadrons, and divisions of each Armes, to meet but one houre or two in the weeke (at times most convenient) to be instructed in motions and firings, by the severall Officers of each Company. That there might be some Immunity Priviledges, or Allowance to the Officers of the Trained Bands, towards their expence of time and Charges. That there should be Countenance and encouragement, given to those that are diligent in the practise of Armes and the study of the Art Military. These, and such like honey dewes, would water the parched barrennesse of our Militia. and fatten the root, to a fragraney of experiment: Inniating, and supplying the nerves and joynts, to an activenesse of Motion. The want hereof, leaves us dull and snoring, in the lap of stupid Security: and renders us ridiculous, in the eyes of our enemies.

But pardon my digression, the sale of my Countries good, had almost intricated my intentions: Casting me a shew, where I had not the least intent to see the Land. Now with your good leave, I returne to the worke of this Chapter. In the which, and the former, I for the more delight of such Captaines, and other Gentlemen, that love to practise numerous formes and figures of Battell, have fitted and stored them with variety; Some for the curious and quainter Souldier; Some for the solid and experimented Souldier; and some to direct the unskilfull and ignorant Souldier; That so either may come and feed according to his owne fancy, and not be cloyed with a continuall intercourse, to one and the selfe-same dish. The Command and Direction for the first Figure followeth.

The command is, *Two first and last ranks of Muskettiers and Pikes, interchange ground.*

That done, *Muskettiers move till you all stand cleere of your Pikes.*

The Direction is, *Two first, and last ranks of Pikes face to the right and left outward. Two first and last ranks of Muskettiers, face to the right and left inward.*

That done, *Interchange ground, and face as before.*

Lastly, *Let the Muskettiers of the front, reere, and flanks, move to the Angles of the Pikes, and face: all to the first front.*

From

With larger numbers where these are but two deep, make them 6, 8, or 10, deeper. This is a very good form for the Muskettiers with halberds.



In this form the Muskettiers may give fire to the Front, Rear or Flanks, any way, or every way. If you fire to the front, the Muskettiers of the Front division having fired two or three times over, the two divisions of Pikes on their Angles may advance and charge, whilst the Muskettiers that last fired, face to the right and left by division, and place themselves behind their Pikes. The Muskettiers of the flanks in the interim, moving forwards, and firing at discretion; The Reserve, or Rear division of Muskets, may in like manner be brought up to fire, as you see fit; each Division may be sheltered by their Pikes. From this take a second Figure, with a little alteration. The Command, Division and Figure, followeth.

By two outmost files, understand the two outmost files on each part as well of front and Rear, as Flanks. And although two deeper, cannot properly be teamed a File; yet let it produce no Criticism, seeing it could not be avoided, considering my number.

Two outmost file of each Flank of the Front division of Muskets: move forward to the Angles of your own Division.

Two outmost files of the Rear-division of Muskets: move to the Rear Angles of your own division of Muskets.

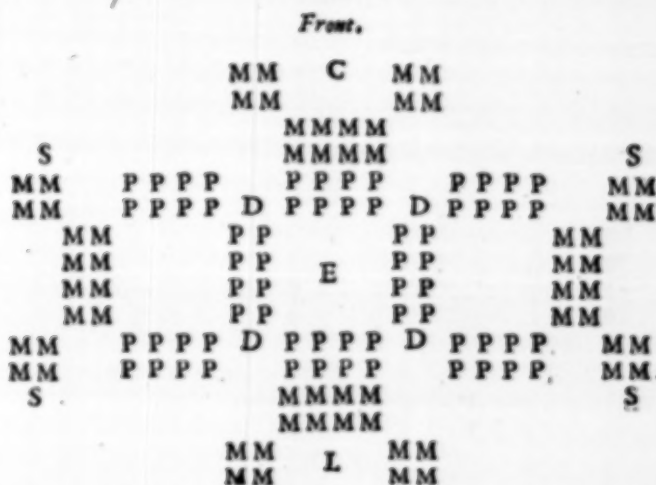
Two last Ranks, of the two outmost files of the Flank divisions of Muskets, face to the Rear; and move to the Rear Angles, of your own Divisions.

Two first Ranks of the two outmost files (of the Flank divisions) of Muskets: move forwards to the front Angles, of your own Divisions.

Four outmost files, of the Battell of Pikes: face to the front and rear: (then) move to the Angles of your own division of Pikes.

The whole Body, face to the Front.

Front.



*This is a very good form for the Muskettiers with halfe Pikes,*

Although this *Figure* be here demonstrated by such small *divisions* of men, let it not perplex the opinion of its worth, rather cast your eyes on the *several divisions* of each *Armes*, and supervise their *orderly placing*. How *offensive* to the *enemie*, how *defensive* to themselves. To demonstrate the *severall waies* of *firing* upon it, would prove as *tedious* as needlesse: Let it suffice that they may *fire*, *advance*, *retire*, *powre on their shot*, and *retreat behind their Pikes*, *inlarge their Intervals*, or *joyne into one grosse*, any of them, or all of them, at *discretion*. Come we now to a *firing*, that shall produce another *Figure*. Let the *firing* be directed to the *Front* and *Rear*, to produce, and to that end command *halfe the Body to face about*; the outmost files of Muskettiers (which were advanced) beginne the *firing*; doing their *execution* on the same ground (without moving forwards at all) by which means they become even in *Rank* with the Muskettiers from whence they were drawne: and so give fire together, once or twice over.

You are further to observe, that the *Divisions of Pikes*, on the *wings*, are in the interim, to advance (forwards) beyond the Muskettiers, there *charging their Pikes*: the Muskettiers, then having *fired* againe, are to *face to the right and left outward*, moving and placing themselves, behind the *divisions of Pikes*. The *Flank divisions* of Muskettiers, in the interim of the *Pikes charging*, are to give *fire*, after the same manner, as the others did before them: And lastly, place themselves behind the *shot* that began the *firing*. The *Bodies of Pikes*, in the midst of the *Battle* (if occasion be) may move forwards and *charge*: if they keepe their standing, and *face to the first front*; this ensuing *Figure* will be produced, &c.

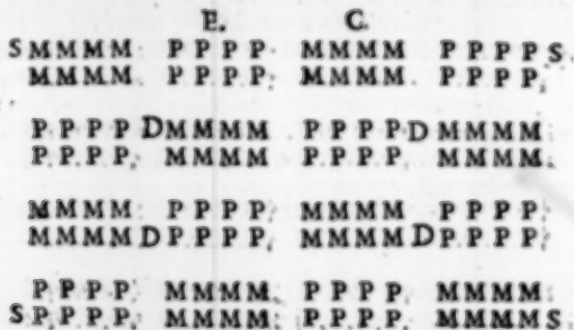
S

Front.



This *Figure*, according as the Muskettiers stand now placed, is most fit for *firings by Extra-duction*: but may by drawing forth of the Muskettiers. be varied into severall other formes, as the occasion and discretion of the Commander shall thinke meet, as the *Quadruple Horne Battell*, to *Front* and *Rear*, and many others. Nevertheless, because I would not be tedious, I will

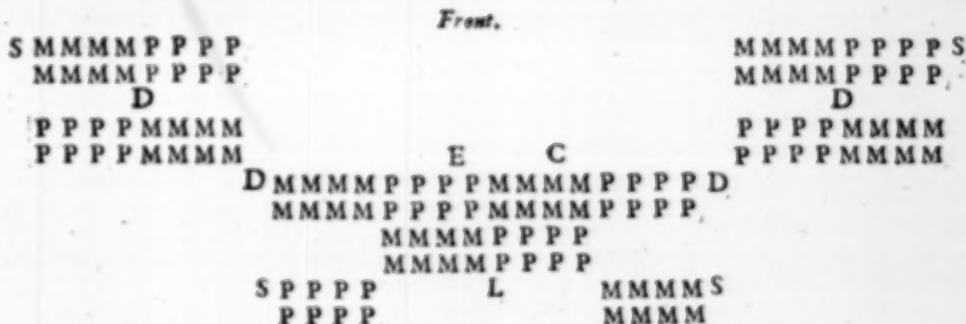
\* The *dis*-next forme the *Checker Battell*. \* Therefore to that end, cause the *Pikes* in the midst, to close their *Files* to make *divisions*. (That done) let the *Battell of Pikes* face to the right and left outward, and place themselves the *Checker* selves even between the *divisions of Muskettiers*; and all face to the front. This being done, the Body stands divided into two deepe *Hearse*s. Next Command, first, *four Ranges* (of each *Hearse*) stand: the rest, by *four Ranges* in a *division*, move forward, and Range even with the front. This being performed, your Body stands in a long *Checker Battell*, 4. deepe, and 32. a breast. If you will make them 8. deepe, with *divisions* (four of each *Armes*) *Checkerwise*: Command one one of the *flanks*, to double the other by *division*. If you please to make 16. *divisions* (*Checkerwise*, and 8. deepe (which is the *Figure* now intended) Command, *left flank*, double the depth of your *Right flank* intire: the which produceth this following *Figure*.



I should be much too tedious, should I enlarge my self upon the severall firings, and figures



of Battell, that might be drawne from this *Checker* forme. I shall demonstrate one, and to draw towards a conclusion of this Chapter: for the which, command the \* *Front halfe of the Body* to \* *By front: face to the right and left onwarde*, (then) move to the *Angles*, of the standing part of the *Body*: (That being done) stand, and face to the *Front* againe: Next command, the *Two reere Angle divisions*, face about, and move to the *Angles* of the standing part of the *Reere*: then face to the *front* halfe of the *Body*, next to the front, againe; and it produceth this following *Figure*.



Rerre

Any ingenious Souldier at first sight, may contrive severall waies, and *firings*, upon this figure. And therefore not to discourse what may be done, nor with what varieties to be done, I will come to the *Reducement*.

To which end, in the first place, close your divisions againe into the *Checker Battell*.

\* *Reducement.*

1 Command the *Front halfe of the Body*, face to the right, and move untill they are cleare of the standing part: then face as before.

2 Command the *four outmost files*, to the right of each division stand: the rest of the *Body*, by four files in a division, invert after the right divisions. Now your *Body* stands in two *harse Battells*: let the *hindmost*, move forwards even a-breast with the *formost*, keeping the *Intervall* open betweene them. Fourthly, command all the *Pikes*, of both divisions, face inward, and close their divisions. Lastly, command *Musketiers* and *Pikes*, both of front and reere, close their divisions to the Battell of *Pikes*. This being done, and all faced to the proper front: they are perfectly reduced as at first.

## CHAP. CX.

How a Captaine, or superiour Commander, ought to be qualified: what is requisite to every common Souldier. The use of variety of formes and figures of Battell with severall Regimentall formes, that may be putted with a single Company and the *Reducement*.

NExt after our *Prayers*, for blessings from above; *Policy*, and *stratagems* of Warre, have been found most prevalent; as more availing then numerous strength: Seldome failing, most time gaining the wreath of Honour. Yes, perhaps by some meane and ordinary wile, the which being once knowne, growes depicable, as falling within the capacity of the meanest judgments. Of this holy *Writ*, as well as prophane *History*, is stored with sufficient examples.

A second meane, conducing towards the advance of villory; is the \* *Love* of our General, Captaine, or Commander; a *Love*, more prizable and estimate, then the best *Armours* of prooffe; as being of such force with the Souldier, that he will never shunne danger, nor refuse to hazard the greatest difficulties; (the further) thereby to gratifie himselfe into the favour of his confidant.

S 2

worthy

worthy *Chiefstaine*, whom for his virtues he really *affectioneth*. For the attaining or gaining this love of the *Souldiers*; It were necessary in the first place that such *Commanders* were

- \* *Experiences* skill
  - \* *Valour*.
  - \* *Justice*.
  - \* *Temperance* and
  - \* *Liberality*
- to be well known to be well *qualified with skill*, having good \* *experience of the Warres*: for the *Souldiers* will not easily flinch or fly from such a *Commander*, whose *wisdom*, *skill*, and *experience*, they are well assured of. Secondly, the \* *Valour* of our *Chiefstaine* is not of least importance to confirme the mindes of the *multitude*: for the courage and skill of the *Commanders*, makes even a *cowardly people hardy*: the want thereof workes the contrary effects. Thirdly, \* *Justice*, for that *Captaine* which with equity and justice can rule his *Souldiers*, neither suffering them to do injury to others, nor receive wrong to themselves, shall gain the love of his *Souldiers*, and feare of his *enemies*. Fourthly, \* *Temperance*: and fifthly, \* *Liberality*. These together build up a man fit for the employment of his *Prince and Countrey*. But which am I soaring! let me check my flight, and returne to the common *Souldier*.

\* *Souldiers* should inure their bodies to hardship.

" *Zenophon* declareth that such *Souldiers*, as serve God, and are obedient to their *Captaines*, may boldly, and courageously fight with their *enemies*, not doubting victory. Adde these three other pertinent necessities to every *Souldier*. First, to \* *harden the body*, that so it it might be invred, and made *capable to endure paines, want, and travell* with patience. Secondly, to *handle* our *Armes* with *facility and safety*. Thirdly, to learne to keepe our *orders*, in *marching, encamping, and fighting*. The which as it cannot alwaies be, in one and the selfe-same *form*; neither ought the *Armes* to be alwaies placed after one and same manner; but be varied according to the occasion, and the wise fore-sight of the *politike Commander*; therefore whosoever would be perfect in this part of the *Art Military*, must often accustom \* *himselfe to the contriving, and drawing forth of many and severall formes of Battell*, consulting their severall *uses*. As some against *Horse*, others against *Foot*, some against *Horse and Foot*: some for *Straights*, some for *Campania*, some for *Hills and Mountainous places*; other for *valies, and watry places*: some for *boggy and rotten ground*; some for *woody and bushy grounds*; some for *nights*, and some for *day*. These notwithstanding *time, number, and place*, will thrust in *accidents*, and often cause alteration, of the most settled, and selected *forme*. Nevertheless, the *Captaine* thus sorted for all occasions (*like the skilful Chirurgeon, having (alves for every soere)*) may with more boldnesse address himselfe to such enterprises, as by *Command*, or *chance* shall be cast upon him.

Hanniball, effeminated his *Souldiers* by once wintering them in *Capua*. Excellent *Commanders* die often *accused* themselves to *contuse* or *impaired* several forms

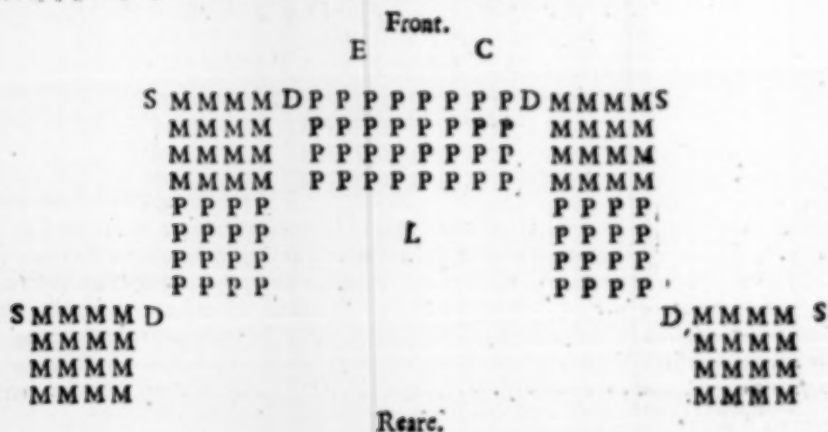
These considerations prompt me to proceed: questioning the length of my discourse, that hath so long detained you from the *figures* of this Chapter. The which that I may timely remedy, Take the \* *Command*, and *Direction* for this following *Figure*. Command the *Assaulters* of the two first and last *Ranks* face inward, the *Pikes* of the same *Ranks* face outward, and make change ground with the *Muskets*. Secondly, Command the *Rear* half of the 8. innermost files, face about: (that done) Lastly, Let the 8. files, so faced to the front and reere, move to the innermost front and reere *Angles*, then stand, and face all to the proper front, by which this *Figure* is produced.



This *Figure* stands very apt for fight, each *Armes* being so placed, that they may be ayding, and assisting to the other. The *Divisions*, *Maniples*, or *Battels* are so orderly contrived, that they may advance, retreat, or relieve one another, without any let, impediment, or incumbrance. When you have given fire at discretion upon this *Figure*: if you would come to a *Reducement*, Close the *Divisions* backe into their places from whence you drew them; and cause the *Pikes* of the two first, and last *Ranks*, to interchange ground againe with the *Muskettiers*. This done, all is reduced as at first. But before we come to the conclusion of this Chapter, proceed wee to some other *Formes*, to satisfie the desirous. The *Commands*, *Directions*, and *Figure* follow.

The directions  
on to make  
the follow-  
ing Figure.

\* *Halfe-files* (of each *Armes*) Face to the right and left outward, and move (untill the *Pikes* stand right) after the *Muskettiers* of the *Front* half-*files* (then) stand and face as before. Secondly, Command halfe-*files* of *Muskettiers*, face about, and move downe, even with the *Rearre* angles of *pikes*: then stand, and face to the front. By the execution of these *Commands*, this *Figure* is produced from the ordinary square of *Pikes* flanked with *Muskettiers*



\* *Naturall*  
*scituation*  
*avails much*  
*for the de-*  
*fence of a*  
*Battel.*

\* *Relieving*  
*about batt*  
*made the*  
*revere the*  
*front.*

This *Figure* at first fight, shewes want of reserves in the *Rearre*: the which must be supplied either by number, by nature, by art. If number be wanting, the \* *Naturall scituation* of the place affording either *Ditch*, *Wood*, or *River*, may suffice as a reasonable defence. If number and nature be both niggardly in their assistance: then let *Art* supply the defect, by impalling the *Rear*, with the *Wagons*, *Carts*, and *Baggage* of the *Army*. Having given fire on this *figure*, as you may severall wayes, sometimes placing the *Muskettiers* in the *Rearre* of their own divisions; and sometimes in the *Rearre* of the *Pikes*: The *Pikes* in the meane time sometimes porting, sometimes charging, sometimes advancing forwards, and sometimes recreating. From this take another *Figure*; the which is thus to be made: Face the whole *Body* about, and command the *Muskettiers* (the which then are in the \* *Front*) to close their divisions. Lastly, Cause the two *Rearre* divisions of *Muskettiers*, face to the right and left outward, and move cleave of the *Pikes*, the which stood before them, (this done) peruse the *Figure*.

*Front*

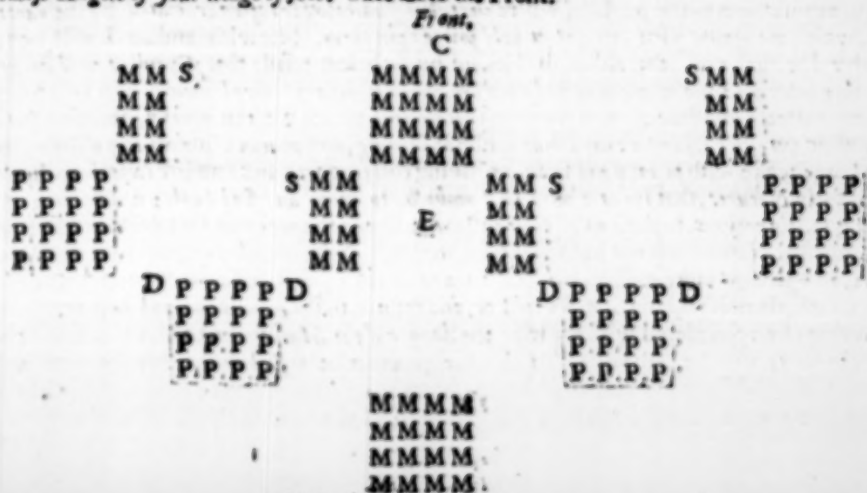


When you give fire on this Figure, the *Muskettiers* of the *Front-division*, are to wheele off, to the *right* and *left*. Nevertheless, if you would have them wheele all off to the *Right*, then open the *Muskettiers* in the *midst*, and make them an *Intervall*. Having practised and tried your *Souldiers*, sufficiently on this *Figure*, we will come to another; but first, \* *Face your Body* \* The *Body* about again after their proper *file-leaders*. Secondly, Command the *front-division* of *Pikes*, face to the *right* and *left* (then) move (and place themselves) before, the two other *Front-divisions* of *Pikes*. Thirdly, Command, the two *Front-divisions* of *Muskettiers* move forwards until their *Reere* be even with the front of *Pikes*: (then) face inwards, close their divisions, and face to the front. This produceth a hollow square, the *Muskettiers* being in the *Front* and *Reere* divisions, the *Pikes* on the flanks-divisions. I forbear the *Figure*, being the same, with that in Chapter 103. Proceed we to our next *Figure*, to make the which, first Command.

\* Two out-most files (of each flank) of the *Front-divisions* of *Muskettiers*, face to the *right*, The direction to make this following firing.

Secondly, Command the two outmost files, of each flank, (of the *Reere-division*) of *Muskettiers*, move up on the inside of the *Front-division* of *Pikes*.

Thirdly, Cause the *Front* half files of each division of *Pikes*; face outward, and move to the outmost Angles of your wings of foot. Face all to the *Front*.





The reduction.

It were needlesse to tell you that this *figure* is most especially usefull for *firings in front*: Nevertheless, it may in like manner very huy serve so *firings in the Rearre*, provided that you face them about, and then move forwards your small divisions of *Musketters into the front*: By which means, in like manner, it might be made a serviceable *fring*. But not desiring to be tedious, I will come to the *Reduement*, and so conclude this Chapter. First, Command the *two outmost files* (or wings of *Musketters*) face inward, and close their divisions. Secondly, Cause the *Musketters in the Rearre*, to move forwards into the *Intervall streights before them*. Thirdly, Command the *outermost divisions of Pikes*, face inward and close before the *Rearre divisions of Pikes*, then face as before, move forwards, and even the *Front of Musketters* (this done, your Muskets are all in the middit, the Pikes on the *flanks*.) Lastly, Command *Musketters and Pikes* interchange ground. This brings all into the first order.

# CHAP. CXI.

*Of the Musket and Halfe-pike, with the severall waies that have been tried to make the Musketier defensible against the Horse: as also some queries objected, to the Halfe pike, and Musket.*

WHEN I first beganne this Edition, I had not the least intent to speake any thing of the use of the *Halfe-pike* and *Musket*, but have wholly reserved it untill another time, yet at the importunity of some of my familiar friends, though it were late, yet they were not willing it should be left out. Nevertheless, when I considered that it had beene the unhappy fate, even of the *greatest and best inventions*, to be embased and vilified; yea, and to be accounted of, but as idle fancies or dreames, before they were published, and being once made known, suffering too much embasement, as being often undervalued; and accounted of but as a thing, that every one could have well performed. And hereof I might demonstrate many examples: \* Wherefore if the *passion of Envy*, have in it any thing allowable and naturall, as having *anger*, *seare*, and other like *affections*: it is in some such case as this, and serveth against those which would usurpe, and take to themselves the *knowledge* and *invention*, wherewith God hath denied to indue them.

\* Rawleigh Hist. mundi.

Therefore were it not for the common good, and the great affection that every one ought to beare to his Countrey: it would appeare more commendable in wise men to conceale their studies, making their *Funerals* in their owne *bosomes* (whence they had their first *births*) rather then to expose them to the publike, where *vertuous studies* are too often cruciated, by the darts of *envy*, which *malignant spirits*, too frequently powre upon them. Notwithstanding I will not altogether discourage my selfe, although I know by sufficient triall, that *Cyniques will barke at those they know not*: and others of as bad a nature, will accompany their *clamours*. For so it is with the inconsiderate multitude, who wanting that *virtue*, which we call *honesty*, and that *speciall grace* which we call *Charitie*: cond. *me* without *hearing*, and wound without any *offence* given. This I can speake with *piety* to my selfe, as having too frequent and familiar *experiences* thereof. But of these *Natures*, that lye as it were in *ambush*, to *carpe and find fault*; endeavouring to wrest good intentions, to their evil constructions: seeing the *wise man* complained of such long since, and that *Nature* hath not been wanting, to thrust off the same *brood* dayly into the World, as bad, and perhaps more malicious: I will leave them to their easie waies of reprehension, then which, there is nothing of more facility, and returne to the worke of this Chapter.

\* Eccles 11 31.

Having often considered with my selfe, the *danger of the Musketier*, and how unable he is to resist the *Horse*, after he hath poured forth his shot, without he be sheltered either by some *naturall* or *artificiall* defence; And withall having knowledge, that in severall parts of *Christendome* divers *Captaines and Soldiers*, have often bin trying conclusions, to make the *Musketiers* as well *defensive*

defensive as offensive. Some by unscrewing the heads of the *Rests*, and then screwing the *stoffs* of their *Rests* into the muzzle of the *Musket*, with the *arming* of a *Pike*, at the lower end, by which means they would use the *Musket* and *Rest* together, in the nature of a whole *Pike*. But this proved so tedious and troublesome, that it fell without profit. Another sort had made *Rests* with the one end of the *forks*, (or head) being like a *pike*, about 18. inches in length: this also proved extreme troublesome to themselves, dangerous to their fellows, and of no validity against the enemy. A third sort had *half-pikes*; of about 7. or 8 foot in length, using it after the manner of a *Rest*: but all the while the *Muskettier* was charging (his *Musket*) one of them was enough to trouble a whole file, besides the danger in the recovery. A fourth sort there was (yet better then the former) that with a *hook* was fastened to the girdle, the while the *Muskettier* was making ready: but this had his defects also, as being both tedious and troublesome. Many other wayes and conclusions, have also beene tried; with successe like the former: which I forbear to demonstrate, for as their conceits proved uselesse, so the discourse would prove as fruitlesse. Lastly, my selfe, with another \* *Gentleman of our ground* (both well affecting the use of the *Musket*) found out a way, to use the *half-pike* and *Musket*, with so much facility and ease, that it is farre lesse troublesome then the *rest*: and yet of a greater length, then any of the former *rests*, or *half-pikes*; as being compleat 10. foot in length, with the *arming*.

Mr. John  
Davies of  
Black-friers

All the former devices, if they could have been brought to any maturity; yet would have falne farre short of this, for the triple use thereof. As being a *rest*, if there be no further occasion; As being a \* *pallisado* (if there be occasion) to defend the *Muskettier* from the *Horse*. As being a *Half-pike* to use in *Trenches*; As also when our *foes* have poured out a great volley or shower of *Lead* on the adverse *Muskettiers*, they may then nimbly with their *half-pikes*, fall in amongst them. And lastly for the pursuit of an enemy, it being of all others, the best weapon.

\* Or swains  
feather.

If a party of *Muskettiers*, were to be sent out, those using the *half-pike*, of all others are \* *Muskettiers* with *half-pikes*; the fittest, for that they are able to offend their enemies, and best able to defend themselves. It is after they have given fire, they should be overtaken before they have made ready againe, and charged by the *Horse*; Yet they are able to defend themselves, with their *half-pikes*, even in the time they are charging: for the front *half-files*, may couch with their *half-pikes* charged breast high, and *swords* drawn, and keepe off the *Horse*: whilst the *Rear half-files* give fire over them, whereby they will bee sufficiently able, to defend themselves; and annoy their enemies. In a word, the *half-pike* and *Musket* for them that know how to manage it, is of so excellent use, that the worth thereof cannot, nor ought not to be confined to the poore demonstration of an unskillfull Writer, that will not take the liberty of a *Hen* to keckle over her owne egge: but leave it to the wide world, to vindicate its own reputation. Therefore now let us come somewhat neerer, and examine what queries, or objections have beene made against it, and you shall find these tenne following.

1. Whether *Muskettiers* with *half-pikes* being to encounter against *Pikemen* and *Muskettiers* with *Rests* (seeing there hath bin no trial) whether Arms, in reason, would have the advantage.

2. Whether the *Musket* and *half-pike* be as serviceable against *Horse*, as the *Muskettier* with the *Rest* and whole *Pikes*.

3. Whether the *Musket* and *Half-Pike*, can as conveniently bee used in all respects as the *Musket* and *Rest*.

4. Whether the *Musket* and *Half-Pike* bee usefull in *Trenches* and *Fortifications*.

5. Whether the *Muskets* with *Half-pikes* can be used in woods, where ambushments are usually laid, if not, where those *half-pikes* are to bee bestowed.

6. Whether the charge wherein the *half-pike* exceeds the *rest* will be countervailed by the services it hath beyond the *Rest*.

7. Whether in Company or Regiment it be convenient, and necessary, to have whole Pikes, or no.
8. Whether Pallisadoes or Swins-feathers, be not as serviceable against the horse, as the half Pike.
9. Whether if all these queries and objections have a satisfactory answer, it be necessary or convenient, that the use of the Halfe-pike and Musket be knowne, before we have publick occasion for service.
10. Whether the waight of the Halfe-Pike, by which it exceedeth the Rest, be not more troublesome counterpoising all the benefits it hath before the Rest.

These *Queries* have beene urged by men not of the meanest *Rank*, nor skill, but even of such whose opinions were very considerable, and whose judgements could not easily be misled; unto which they received such satisfactory answers, as you may further peruse in the Chapter following.

#### CHAP. CXII.

*The ten Queries objected to the Musket and halfe pike fully answered. The Halfe-pike joyned with the Musket approved to be very usefull, as having received approbation from divers Soldiers of great Rank and quality.*

\* To the  
first.

HAVING in the last Chapter shewed the queries objected to the Halfe-pikes and musket; Come we now without preamble, to give an answer to each of them successively. To the first we say, That \* Muskettiers with half-pikes have the oddes, against Muskettiers with Rests and whole Pikes, for these and such like reasons; for presuppos: what number you please, the one halfe whole pikes, the other halfe Muskettiers and Rests. The fight being begun at distance (as must needs be conceived) the halfe-pike-men poure on a great deale more shot, at least three to one: by which means the adverse part must needs be broken and spoiled, before they can possibly come up to the push of pike. Secondly, They that escape death and wounds, if their hearts serve them to come up to the push, will be so weary, windlesse, and out of order with their halt, that they will not be able to stand against their Adversaries, who keeping their ground, will neither be weary nor out of order. Thirdly, the Muskettiers that come up a-breast, even with their Pikes will with them be sufferers of the like inconveniences: and now being come to close fight are not possibly able with their Rests, to withstand the better armed halfe pike man. Fourthly, if there were any reasonable proportion of whole Pikes joyned with the halfe-pikes and muskets; the advantage then would be unquestionable.

To the second we say, That Muskettiers with halfe-pikes, in stead of Rests, are more serviceable against horse, then whole Pikes and muskettiers with Rests, for these reasons: First, *Whole pikes alone are too weak*, because the horseman carries fiery weapons, and can kill the Pike-man at distance, they neither being able to defend themselves, nor offend their enemies. Secondly, muskettiers with Rests, are not able in open *Campania*, to withstand the able and resolute horse-men, which will break them through, and through. Thirdly, both conjoyned in one body are too weak: in open, and even Countries to withstand the horse: for if your Pikes be flanked with muskettiers (according to the usuall manner) then the horsemen kill the Pikes at distance (as aforesaid) and rout, and p'under t<sup>e</sup> Muskettiers on the flank's, they having little possibility of aide from their Pikemen, when the horse are entred pell mell, amongst the muskettiers, knocking and treading them downe. Fourthly, if they draw into any other forme of impalement, then one Armes becomes a trouble to the other, neither being able to performe their due execution. Fifthly, muskettiers with halfe-pikes, are able in any forme, or figure of battell, to defend themselves from being broken by the Horse: and by so much, as their *fiery weapons* doth exceed the horse mens in execution; by so much they will be too strong for him in the open field; and far more in a *stright*, or place of advantage, where either *Nature* or *Art* hath secured the flanks.

To the third we say, That the Halfe-pike joyned with the Musket, is very as conveniently in all respects.

respects be used for \* *ease*, and indeed is more accommodable than the *rest*: being more *ex-adite* for *execution*, and far more *safe* for *defence*.

To the fourth we say, That the *Rest* is of no use in Trenches and Fortifications, where men present upon a breast-work or parapet: the *half-pike* in such cases may be usefull, as when it happens they come to *close fight*, where it proves advantageous.

To the fifth we say, Neither *Rest* nor *Half-pike* are necessary or usefull for the Muskettier to carry, in woods and thickets: whether it be to lay ambushments, or to the contrary, to search them out, and beat them off. Yet in such cases they are farre more usefull then whole pikes, being more easily manag'd: Nevertheless if it be in great timber-woods and forrests, there the *half-pike*, may prove usefull and portable. But if it shall be found inconvenient for such service, then they are to be disposed in the Carts, and Waggon of Ammunition, or elsewhere, as opportunities shall be offered.

To the sixth we say, That the service considered of the *half-pike*, the charge of it above the *Rest*, is not considerable for a *serviceable half-pike*, may be had for 2. s. 6. d. which exceeds not much the price of a *Rest*. Further, when it shall appeare, that the *Half-pike* and Musket will prove more advantageous to our Nation in case of invasion, then it can be to any enemy invading: then it may be presumed, were the charge far greater then it is, yet it ought not to be neglected.

To the seventh we say, that *whole Pikes* by no means are to be left or neglected, because for some services they are especially usefull: notwithstanding; or; part at the most is sufficient, either for *Company* or *Regiment*; for the Muskettiers are easily transferred into pikemen, by changing of their Armes when occasion requireth; But the Pikeman cannot so soone, nor so easily be made a Muskettier: when the suddenesse of the occasion, or the quality of the wars shall require it.

To the eight we say, that *half-pikes* are equally usefull, and serviceable against the Horse, as the *Palisado*, when in the same kind they are used, *viz.* Being struck or fastned into the ground; and hath these \* advantages above the *Palisado*. First, the *Palisado* is alwayes troublesome to the Muskettier in the carrying, being never helpfull in the *March*; But the *half-pike*, like the *rest* (and better) affordeth much ease to him that carrieth it without trouble. Secondly, the Muskettier while he carrieth his *palisado* in his hand, cannot give fire upon occasion; but the *half-pike* is then as usefull as the *rest*. Thirdly, there can no use be made of the *Palisado* against foot: But the *half-pike*, is then a serviceable weapon, and indeede is not onely *half-pike*, but also hath all the accommodations, both of *Rest* and *Palisado*.

To the ninth we say, because England is ill furnished with horse, the benefit of the *half-pike*, in defending the charge of invading horse, is more necessary for us to *imbrace*, then for others: and therefore it ought by us generally to be practised.

To the tenth we say, that which hath beene already delivered, and continuall practice will make manifest: First, that the weight the *half-pike* hath above the *rest*, is *so* by *it* empowered by other benefits. Secondly, Experience makes it appeare, that the weight, though it be more then of the *rest*; yet it is no way more troublesome.

Let me adde one benefit more of the *half-pike*, although it concerne none of the queries. The Muskettier, whether he use *rest* or *half-pike*, can doe no *execution* at any great distance; if he want powder, match, or bullet, the which often are in the one or other found defective; then the *half-pike* is usefull. Secondly, grant the Muskettiers to be well accommodated with fix Armes, and well fitted with good powder, match, and bullet: yet sometimes the extremity of weather, even in the joyning of the Battell, may make the fiery weapon of no use, by excesss of hails, snow, or raine, or the like: But then shall the *half-pike* have great advantage above the *rest*, it then being a serviceable weapon, either offensive or defensive.

Now although this might suffice to give satisfaction to any rationall men: yet besides this,

\* The *rest* was devised only for to ease men when the Muskets were of 18. or 20. l. weight: But now the Muskets are made lighter (as not exceeding 10. l. or 12. l. and halfe in the Magazine) the *rest* is of small use therefore no man vaile, the *Souldiers* throw them away. But the *half-pike* is an offensive weapon, yea so far exceeding the *rest*, that it is many ways more serviceable then the sword it selfe, both for offence and defence.

\* The *half-pike* may be found more usefull than the *Palisado*.



it hath had the *approbation* of many of the better sort of Souldiours, that have seene the use thereof. As Sir *Thomas Glenham Collenell*, a Gentleman of as serene a judgement, and as great a lover of *Armes*, as any I know in the *whole Kingdom*. As also *Lieutenant Collenell Chamberlaine*, an approved Souldier in most of the *German warres*, the which have beene in our time; who tooke such an especial liking to it, that he caused a *Swedish youth* that attended him, to learne the *use thereof*, and two of his Serjeants. Many others both of skill, and quality, that have seene it practised, have also given their approbation unto it. But I would not be tedious, therefore take this one for all, the which may serve to stop the mouths of the most malicious: it is a Letter sent by the Lord Viscount *WIMBALDON*, to the President, and *Gentlemen of the Artillery Garden, London*, the third of March, 1637. The Coppy of which Letter I have inserted *verbatim*, as followeth.

*The Use of the Halfe-pike and Musket together.*

WHEREAS the *Halfe-pike* and *Musket* being practised by some *Gentlemen*, using *Armes*, in the *Artillery Garden*, which are *Armes* both Offensive and Defensive; and after consideration of them, being desired to give my opinion of their usefulness. These are to certifye, that having well considered of the usefulness of the Invention, my judgement is, that *these Armes may prove very serviceable, and advantageous to the defence of the Kingdom*, and therefore I hold it fit, that they should be practised for these reasons following;

First, That in regard that the greatest danger of this Kingdome doth consist in being surprized: and that there is nothing can defend a Landing place better, then *Horse* with *Muskettiers* behind them; So I hold the *Halfe-pike* the more serviceable, for that the *Horse* shall carry both Offence and Defence by those *Armes*, and in farre shorter time come to the Landing place then any Foote, the *Horse* marching further in a day, then the Foot in three.

Secondly, they are better then single *Muskettiers* to force a *Quartier*, being mounted up behind *Horsemen*.

Thirdly, they are good in Trenches, for they will be able to defend themselves with their *halfe-pikes*, after they have discharged their *muskets*, for want of which, the single *Muskettier* is forced to retire, to a great confusion, and hindring those that are behind them.

Fourthly, And above all things in *skirmishes*, when no *pikes* are able to defend them, they are able to defend themselves, and when they doe retire, as ordinarily they doe behind the *riere* of the *pikes*, being forced by a stronger enemy, they are able to gall the enemy upon the *flanks*, and doe great service without danger.

Fifthly, in *narrow straites and passages*, they can Defend and Offend more then any *Pikes* or *Muskettiers*; For where *Pikes* and *Muskettiers* cannot serve, they will doe double service with single bodies.

For these and some other reasons, I approve of the exercise of them in your several meetings, and doe thinke it fit, that all such practitioners of these *Armes* (which I could wish were more) be not interrupted nor hindered in the use of them, but may receive good encouragements for the better prosecution, and finding out the compleat use and perfection of them; And that the Captaine and other Commanders of the Company, at their severall times of exercising, constantly put in practise the said *Armes*, which I doubt not, but will be found very advantageous to his Majesties service.

*Cecil house, Marth 3. 1637.*

WIMBALDON.



## CHAP. CXIII.

*Of the Halfe-pike, how it may be serviceable on all formes: with severall figures,  
indifferently usefull to Halfe-pike or Rest.*

**T**He *Musket* and *Halfe-Pike*, having thus vindicated its reputation, it were needlesse to speake further to it: although much more might be said to good purpose, in the further *Approbation* thereof. Nevertheless being that as yet, it hath not beene scene by his Majestie, and his Councell of Warre: and till then it can receive no generall allowance; the use thereof for the present; being onely for voluntary Companies, and such other Gentlemen, that practise the experiment for the good of the Kingdome; Therefore I must entreate my loving friends at present to accept of the *Postures* of the *Musket* and *Halfe-pike*; and hold me excused that I doe not enlarge my selfe in discouraging the *motions, formes, and figures* most proper to that weapon: seeing I hope before it be long the use thereof being perceived, will bee enjoyed by authority, and then God willing, I will write something for the *Musket* and *Halfe-pike* by it selfe. And now we will proceed to the *Postures*, supposing our *Musketiers* to come ready charged and shouldered into the field, and from thence, make the entrance upon our *Postures* of the *Musket* and *Halfe-pike*:

The Carriage of the *Halfe-pike* upon a march, may be usefull these foure severall wayes.

*Viz.* The *Muskets* being shouldered, the *Halfe-pikes*.

Advanced.  
Ordered.  
Comported.  
Tract'd.

1. A full Body of *Musketiers* marching with *Halfe-pikes* advanced, is glorious to behold to our friends: Terrible to be scene of our enemies.
2. Marching with *Halfe pikes* ordered, is no other but as a staffe to ease you in your march; or as you use the *Rest* marching in the right hand,
3. *Comporting* your *Halfe-pikes* marching, is to be understood, when you march under Trees, or some such place where they cannot be ordered or advanced.
4. *Treying* your *Halfe-pikes* is at such time as you march thro' low woods, and thickets, when the *Halfe-pikes* can neither be advanced, ordered, nor comported.

Being come to the place where you meane to shew the *postures* and *motions* of the *Musket*, joyned with the *Halfe-pike*. First, take the *halfe-pike* into the left hand with the *Musket*. Then

Unshoulder your *Muskets*, and poise,  
Joyn your *halfe-pike* to your *Muskets*  
Pitch your *Armes*.  
If the wind be high, then  
Sink your *Muskets* downe to your \* devise  
In case of flowers, or rains,  
Reverse your *Muskets*,  
Recover your *Muskets* and *halfe-pikes*,  
Draw forth your match,  
Blow your Cole,  
Cock your } March,  
Fit your }  
Guard your pen,  
Blow the ash from your coale,  
Open your pen,  
Present upon your *halfe-pike*,

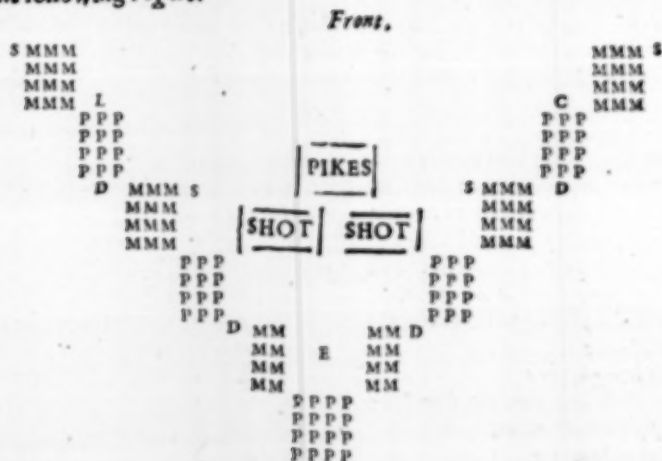
Give fire brest high;  
Dismount, joyning your *halfe-pike* to the  
outside of your *musket*:  
Vncock and returne your match,  
Cleere }  
Prime } Your pan,  
Stut }  
Cast off your loose cornes,  
Blow off your loose cornes, and bring about  
your *muskets* and *halfe-pikes* to your left  
sides;  
Sink your *muskets* upon your *halfe-pikes*,  
( charge with powder,  
Draw forth } Your Scouring-stick,  
Shorten }  
Charge with bullets, and put your scouring-  
stick

\* Which  
most call  
a Ketch.

*Slick into your musket,  
Ram home your charge,  
Wish-draw, } Your Scouringsticke.  
Shorten,  
Returne,  
Bring forward your muskets and halfe-pikes;  
Raise your muskets into your Rests,*

*Ground your halfe-pikes for the horse,  
Draw forth, } Your Match.  
Cock,  
Blow, Open, and Present, either in single  
ranks, 2, 3, or 4. ranks together,  
Give fire altogether.*

Now having ended the *Postures*, for matter of *firings, formes, and figures of Battell*; there is none in all the booke, but is *usefull*, one way or other, for the *halfe pike*: either in the way of a *Rest*, of a *halfe-pike*, or of a *pallisado*, and so may be used accordingly; but I have too long held you in discourtesie: proceed we now, to demonstrate some more *formes*, the which may be indifferently usefull, either for *Halfe-pikes* or *Rests*, &c. First, Command, *Wheele your flanks into the front*, and then *face a'l as before*, this brings all the Muskettiers in the Front. Secondly, Command the *Four innermost Files* (as well *Muskets* as *Pikes*) to stand, the rest of the body to *face to the right and left*, and move untill there be *Intervals* made sufficient to receive the Muskettiers of the standing part, then stand, and *face as before*. Thirdly, Command the three outermost *Files* of each flank to move, and leave *intervalles* as aforesaid. Fourthly, Command the *Middle division* stand, the other divisions move forwards, till their *reere* be advanced even with the *Front Angle* of the standing part. Fifthly, Command the two outmost divisions move forwards, placing their *Reere* as aforesaid. Lastly, Command the Muskettiers to *face outward*, and move cleere of their whole *Pikes*, then *face as before*, and ground their *Halfe-pikes*, as in the following *Figure*.



When this Figure is drawne, if your Muskettiers be *Rest-men*, then they may fire, and fall in the *Reere* of their own: Divisions. Secondly, They may give Fire, and Flanke their *Pikes*. Thirdly, they may give Fire and place themselves in the *Reere* of their *Pikes*, &c. If your *Shot* be Muskettiers with *Halfe-Pikes*; Then if there be any feare of the *Horse*, cause them to ground their *Halfe-pikes*, in the forme they now stand: the which being performed, they may give Fire at discretion, either by single *Ranks*, by two, three, or foure *Ranks* together: having fired they may either *face about*, and move out of the *Horse-mans shot*, untill they are ready againe, or they may place themselves behind their *Pikes*, according to the former direction: *Rest*, &c. If at any time the *Horse* chance to finde the Muskettier unprovided, th

is, take him in the time he is charging, before he is ready. Then three or \* four of the former Ranks of shot, may couch with their Halfe-pikes, (the one end against the ground, the other breast-high) holding it Pallisado-wise in the left hand, their swords drawne in the right, in this manner keeping off the Horse. The Reere halfe-files of Muskettiers, in the meantime having made ready, may securely pour out their shot upon the Horse, either by single Ranks, or by two Ranks together, which the Horse are not able long to endure. Having given Fire so often as you please on this Figure. Command the foremost Division of Muskettiers on each wing, to face about and move, untill they range even with the next divisions of Muskets, then stand, and face as before. Next, Command the two foremost Divisions of Pikes face about, and move untill their Front range even with the Reere Angles of the two Front-divisions of Muskettiers, then face as before; and it produceth this following Figure.

\* Four Ranks of halfe pikes being in this manner charged, are stronger then six Ranks of whole pikes charged over hand.

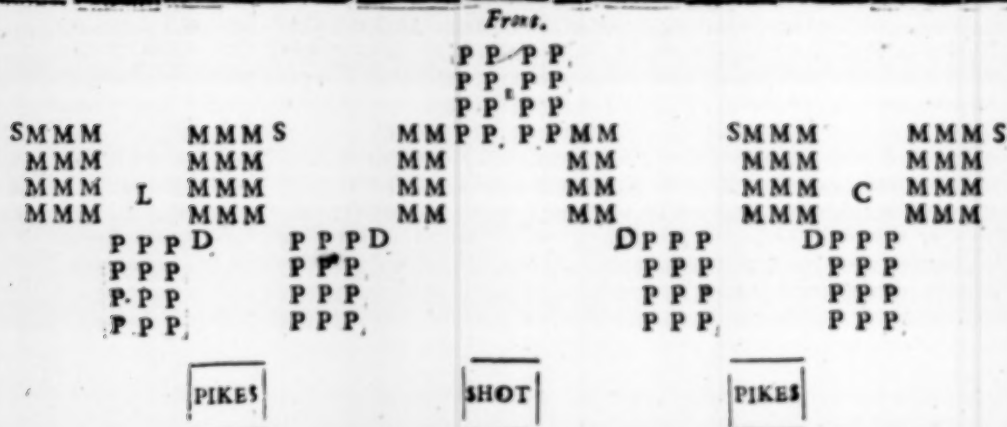
Front.



When you have well perused this Figure, you will perceive that each Battell, Manniple, or Division, stands well Ordered and prepared for fight; if any part happen to be distressed, the other may readily move forwards to their reliefe; or they retreat without *incumbering* one another; for the wayes to give fire on this forme, there are so many, that it were pittie to describe any: for they may fire, *advancing, standing, or retreating*. They may also give fire and keepe their figure, the Muskettiers moving forwards, and maintaining the same ground, flanking their Pikes, or falling in the reere of the Pikes. If your shot be halfe pike-men, then they may doe all this and more: for after that they have grounded their halfe-pikes (if there bee any such need) they may give fire, and retreat by passing downe into the Intervals (behind them) keeping themselves secure from the *Horsemen's shot*, untill they have made ready againe; for the halfe-pikes sticking in the ground (Pallisado-wise), ranke after Ranke, the Intervals are safely enough blockt up. They may also having poured on their shot, fall behind their own Divisions of Pikes: this being done, and the Muskettiers made ready againe, then they may give fire by \* *extraduction*, the Pikes porting over them, &c. Let not the easinesse of the making, nor the aptnesse of varying from one forme into another, any way disparage the worke: for those Figures that are best for service, and ordered with most facility are ever to be preferred. With some little alteration, proceede we to a third Figure: for the making whereof Command the two Reere-divisions of Muskettiers, to move forwards, and range even a breast so. with the other divisions of Muskettiers. Secondly, Command the Reere division (or Battell) of Pikes to move forwards, untill the Reere range even with the Muskettiers, that moved last before them. The Figure followeth.

Front.

\* Of extraduction look back into Chap.



The Re-  
ducement.

Concerning *firings*, what hath beene said of the former Figures, may in like manner be performed on this: therefore not to spend more time about it, we will come to the Reducement. And to that purpose, first command the *Front division of Pikes* face about, and move even with the other divisions of *Pikes*, then stand, and face as before. Secondly, command all the *Divisions* (as well *Muskettiers* as *Pikes*) to face to the Right and Left inward, and to close together into one body: This done, next Command them, *whistle their Reere into the midst* (or *flankes into the Reere*.) Lastly, all being faced to the proper front, they are Reduced as at first. I might have further enlarged my selfe upon this subject of *Firings*, and figures of Battell, and have shewed variety enough of formes, either *Regimentall*, or for private and single *Companies*, as *Trine Battells*, *Round Battells*, the *Crosse* and *Round* in one, the *Solid square* impaled, with infinite others; But I have advanced farther already, then I at first intended, though, well I hope, no further then will be freely, and lovingly accepted, Which if it be I shall conceive my self to have received a gratefull and most ample satisfaction. The hope whereof doth somewhat incourage me to proceed a little further. And as I have already shewed divers and severall motions; with a large addition of formes, and figures of Battell: Yea, and in all (or the most part of them) I have not onely given the words of *Command* and *Direction*, to produce them from the Ordinary *Square*; but also together with the demonstration of the *Figure*, and direction for the *firing*; I have in like manner given them proper *Directions* for their *Reductions* againe. So now for the satisfaction of some of the quainter sort of *Souldiers*, give me leave to adde one *Figure* unto another, untill that by *Firings* I Reduce *Firings*. For the performance whereof, that I may observe some method, I will digest them into the way of *exercise*, &c.

Nevertheless, before I come to that, give me leave in one word to satisfie many, whose importunity would have prest me, to have writ something for the exercise of the Cavalry. For my owne part, I should thinke it a great deale of labour spent to little purpose therein: seeing such Gentlemen that are desirous of information that way, may buy that excellent Booke intituled *Military Instructions for the Cavalry*, Set forth by that Worthy, and well-knowing Gentleman, Captaine John Cruso of *Norwich*. Wherein the meanest Cavalier may gaine knowledge: and the best may review, and supervise the Idea of his owne experiments.



CHAP. CXIV. *The First dayes Exercise.*

**H**AVING brought your *Company* into a place convenient, where you intend to exercise them; if you have time enough, you may cause the *File leaders*, *Corporals*, or *Serjeants*, to instruct them in the \* *Postures* and *travelling* of their *Arms*. Wherein having spent some time, to the benefit of the *Company*; upon the \* *Summons* of the *Drum*, each *File leader* with his *File*, is to march into his place. The *Captaine* (or other *Commander*) being at the head of his *Company*, commands them to *even their Ranks*, and to *streighten their Files*, and *stand to their order both in Rank and File*. \* If your *Ensigne* be not already in the field, but in some place neerer at hand; then cause your two innermost *Files* of *Pikes* to advance; commanding a *Serjeant* with a *Drum*, to *traverse* them along to the place of *Relevance*, there to fetch their *Colours*. If the place be not nigh at hand, take as many *Files* of *Muskettiers*. Having brought the *Ensigne* to the head of the *Pikes*, each *File* returns into his place; the *Officers* likewise withdrawing to their severall *stations*. \* Silence being commanded, the *Captaine* (or other *Commander*) begins \* first to instruct the *Souldiers* in the severall *distances*, betwixt *Ranks* and *File*, with the wayes to *open* and *close* to them. And if he thinks fit, to instruct them in the severall *uses* of each *distance*.

Next after *distance*, they are to be instructed in the \* *facings*, then in the *doublings*; next, in the *Counter-marches*; and lastly, in *wheeling*. In each of which they are to be instructed, according to the opportunity of the time and place; but especially, the capacity of the souldier is to be observed. Wherein, the *Captaine* may doe very well, in each of the *motions* to lay downe some speciall *rules* and *observations*; by which the *Souldier* may the better understand what he is to doe, and how (the best way) to performe it.

\* After the *motions* ended, let them prepare for *skirmish*. And first you may cause them to give fire with forlorne *Files*, marching forth twenty paces (or thereabouts) before the *Front*. Having all fired over that way, they may give fire once over, by advancing two *Ranks* together ten paces before the *Front*. Then let them give fire, even with the *Front*, and then with the half-*files*; the *Pikes* porting or charging, according to discretion. The *Pikes* being advanced, and the *Muskettiers* marched up, even with their *Front*; you may either \* *face about*, *wheel about*, or *Counter-march*, and so give fire in the *Reere*; Your *Pikes* then being shouldered. After your *Muskettiers* having fired over in the *Reere*, you may, (if you please) \* *wheel your flankes* in to the *Front*, and so charge *Pikes* to the *Reere*. Which done, *wheel your front* into the *midst*; passe into your place, and face them to you. Then (if you will) you may passe your *Muskettiers* of the left flank, through betwene the *Ranks* of *Pikes*, and place them next to the right flank of *Pikes*, opening the right flank of *Muskettiers*, to give them way. Then let the \* *Pikes* shoulder, and *Muskettiers* give fire to the right, upon a *march*; their leaders leading them up betwene the *Pikes* and their owne divisions of *Muskettiers*. Having fired once over, in this way, let them continue their firing to the right, each *leader* leading up his *File* on the out side of the left flank of *Pikes*. Then \* let the *Pikes* advance, even whilst the last *File* is giving of fire; and so soone as the *Pikes* are cleere of the *muskettiers*, let them face all to the right, and charge. Having advanced your *Pikes*, and faced your body againe to the *left*, you may then *wheel your Battell about* to the right, and then facing the whole body to the left, the *muskettiers* will be all in *Front*. Then let your *muskettiers* give fire, and *wheel* all off to the right, the *Officers* to that end making an *Interval* for the left flank, or else let them *wheel off* by *division*, placing themselves in the *Rear* of their owne divisions of *muskettiers*. Having given fire once (or oftner) over that way, let them give fire againe, and *wheel off* by *division* *vanishing even* with their *Pikes*.

*Counter-marches*, & *Wheelings*, wherein the *Souldier* ought treatably to be instructed, the *Commander* alwayes observing what his *souldiers* are he hath to deal' withall, and to give his directions accordingly. \* Observe to march betwene a *h* firing, and upon each figure as may be convenient. \* *Face about*, or *wheel about*; for to *counter-march* if any *enemy* be neerer, is very dangerous. \* *Wheele your flankes* into the *front*, if your *Souldiers* have time enough, or otherwise face to the *Reere* and charge *Pike*. \* When the *Pikes* shoulder the *Muskettiers* must observe to *rank* even with them. \* Upon this firing, advance *Pikes* when there is but one *file* of *Muskettiers* to give fire, and close forwards to the distance of order. \* These kind of *Intervals* ought to containe six foot in distance, upon some other occasions, a foote is necessary.

\* It is very necessary, fill so often as time will permit, to instruct the souldiers, in the postures, and the well handling of their Armes. \* Each File-leader to lead up his File upon the first Summons of the Drum.

\* Ever to observe to be even in Rank, and stand at the true distance. \* Fetching the Ensigne to the head of the Company. \* Souldiers ought to be very silent. \* First, the souldiers ought to have their due distance given them, with directions how most properly to performe it.

\* Facings, Doublings



The hollow square, with Muskettiers front and reere, Pikes on the flanks.

Captaine Wallers firing, as in c. 93.

That being done, cause the Pikes to *Charge*: the Muskettiers giving fire once over, on that figure. The Pikes being advanced, face the whole body to the right: and cause the Muskettiers to stand, and the Pikes to open to the right and left, and so to make the hollow square. Then you may (if you please) command the Exerpts to display his Colours in the midst of the hollow; in signe of triumph, the body either standing or marching. After which, command the Pikes to close their divisions: Which being performed, command the Reere Division of Muskettiers, to double their Front of Pikes, by division: and then they will stand in forme of Captaine Wallers Triple fringes. Let them give fire upon that Figure, and fall off againe, according to the directions upon that Figure. Which being performed, and the Pikes charged, and re-advanced; the body will be absolutely reduced, as at the first it was before you began your firings. These firings may (with the motions) be sufficient for the first dayes Exercise. Wherefore, for this time, we will lodge our Colours: untill by the Summons of the Drum, we are called forth to the second dayes practise.

## CHAP. CXV.

### The second Dayes Exercise.

Silence.

Upon all motions before that the Souldiers stand even in rank and file.

Good words more available then blows, as all language. The Muskettiers make ready to give fire.

\* Horn Battell.

75.

\* Demy.

Heffe, as in

c. 76. Be-

tween each

firing, cause

your body to

move either

in forme of

Battalia,

extended in

length: as

upon any

other figure

for it is

very conven-

iently be-

done with-

out disorder.

A firing is

to be done.

HAVING brought your Souldiers the second time into the field, the body being drawne up into the ordinary square, and every Officer vigilant in his place: the Captaine commandeth silence, with some other generall termes of observation, both for the leaders and right-hand men. Having thus commanded them (as before) to even their Ranks, and to straiten their files: he proceeds to shew (as formerly) the distances, the facings, the doubling, the Counter-marches, and the wheelings: therewithall instructing them either in all, or so many of them, as the time will permit, and he thinkes convenient. Ever (by the way) observing that in the Proverbe, *A thing once well done, is twice done.* That Commander, that exerciseth his Souldiers with good language, and with solid reasons, shall make them better proficients than he that shall use rigid termes, and rough hands. After the postures, distances, and severall motions; that which next followes for this dayes Exercise, are firings and figures of Battell. So soon, therefore, as the Drum begins to beat a preparative, the Muskettiers are to begin to make ready.

And first, you may cause them to give fire on the \* *Horne Battell*, still marching up into their rank, as in c. 75. *leaders ground*: by that means preserving their Figure.

Secondly, let the Muskettiers close their divisions before their Pikes, and then give fire upon the demy-Horne Battell: falling off precisely, either all to the right, (the one halfe passing downe an Intervalle) or to the right and left by division; and placing themselves in the Reere of their owne divisions of Muskettiers.

The third time of their firing, let them wheele off by division, and flanke their Pikes; and when they have fired over that way, let the Pikes charge.

For the fourth firing, let them give fire even with the Front of Pikes, wheeling off to the right and left, and placing themselves in the Reere of their owne divisions.

Then let them fire even with the halfe-files wheeling off by division, and placing themselves in the Reere of the Pikes. The Pikes (you are to understand) ought to charge all the time of the last firing: who being advanced, wheele your Battell about to the right or left.

Then your Muskettiers being in the Reere of your Pikes, let your first firing be to the Reere the Muskettiers wheeling off by division, and placing themselves before the Front of their own divisions of Muskettiers, next behind the Reere of Pikes. Having fired once over, that way, let them give fire over againe, and flanke their Pikes: which being in like manner performed, command them to wheele their flanks into the Front, and then face to the Reere, and charge Pikes, at the side of the right face, with their words drawne in their right hands.

Left

Let the seventh firing be discharged <sup>\* over their Pikemen, wheeling, either all off, to the right</sup> through *Intervals*, or else by *division*, and placing themselves in the *Reere* of their own <sup>\* In stead of giving fire over their Pikemen, they may give fire by extra duty, as in c. 80.</sup> Files. Otherwise (for want of Room) the first Rank of Muskettiers, having given fire, let them kneele, or crouch low upon the ground: and make ready againe, the second Rank, in like manner, firing and kneeling: and so for the rest. Having all fired once over, in that manner, let the Pikes advance, and put up their swords: the Muskettiers in like manner, are to rise after them to even their Ranks, and *straighten* their Files.

For the eighth firing, you may *face* the body to the *Reere* (or if you will continue your firing, the same way) then wheele your Battell about, and having opened *Intervals*, your forms will be the *\* broad-fronted Phalange*, or *broad-fronted Battell*. Let these give fire, the first time falling (or wheeling) all off to the right, and placing themselves in the Front of the Pikes, and *Reere* of their own divisions of Muskettiers. The second time of firing, let them wheele all off to the right, (as before) and place themselves in the *Reere* of the Pikes, which follow next after their own divisions. In the *Intervall* of the last two Ranks firing, cause your Pikes to Port; but when the Muskettiers are cleared away, the Pikes may Charge.

When the Pikes are advanced, and that they have closed their divisions for the ninth firing, <sup>\* The Figure is most commonly called the broad-fronted Battell, but most properly the long-fronted Battell, for that the length, between flank and flank, this is in c. 81.</sup> cause them to open of the flanks, and wheele them into a *Semi-circle* or *\* Convex halfe-moone*, where the Muskettiers being outermost, give fire upon that figure: the first time, falling behind the Muskettiers of their own divisions: The second time of firing, cause them to place themselves behind their Pikes. For further directions, look backe upon 79 Chapter, which discourses of the *Convex halfe-moone*. The Pikes may also charge, and the Muskettiers give fire over againe: according to discretion. The Pikes being re-advanced, <sup>\* Convex halfe-moone, as in c. 79.</sup> face the whole body to one of the flanks, and march them out Herse-wise. Then command them to double their ranks to the right: which being done command that flank which are Muskettiers, to double the contrary flank by division: which being performed, all the Muskettiers will be in Front and *Reere*. Then cause the *Reere*-division of Muskettiers to double the Front of Pikes, by division.

Then let them give fire on that figure, as you may see further directions in the 93. Chapter. The Pikes having charged, and advanced againe.

For the eleventh firing, first face the whole body to the right: then cause the halfe-files that then are, to face to the *Reere*; and so let the Muskettiers give fire to the Front and *Reere*: wheeling off by division, and flanking their Pikes. The Pikes may also charge to the front and *Reere*, which being performed, face them all againe, to their *\* leader*.

For the twelfth firing, make the *Phalanx* or *four-fronted Battell*: the *Angles* whereof being filled with Muskettiers. For further satisfaction, look upon Chap. 103. which gives direction, both for the motion and reducing thereof. Next, face the whole body to that part which was the Front, before the last firing began. Then, if you would have your *Ensigne* to display, in an hollow Square, cause your Muskettiers to stand, and halfe files of Pikes to face to the *Reere*: and so both divisions of Pikes to march, untill their last ranks are even with the front and *reers* of Muskettiers. Then face all to their leader. If you please the Muskettiers may give fire upon this hollow Square, as they march, to both flanks: still leading up their files, on the inside of their own divisions, and this will make the 13. firing. <sup>\* The Leader is then conserved to stand in that part which was the Right flank, the which was the front of the eleventh firing.</sup>

But by this time, our powder being spent, our men weary, and night approaching: We will come to the *redoubtment*. Wherefore, first cause the Pikes to close their divisions, and the Muskettiers to march up, even with their Front of Pikes. Then let the whole body, wheele their flanks into the *reere*, which being done, all the Muskettiers will be in the *reere*. Then (if you will) face to the *reere*, and give fire, causing your Muskettiers to wheele off by division, and to flanke their Pikes. Or else, cause your Muskettiers to open to the right and left, and double your front of Pikes, by division. Which being done, double files to the left, and they will be all reduced as at first. Wherefore, we will now *close out* Colours, and conclude our several dayes Exercise.

## CHAP. CXVI.

*The third dayes Exercise.*

Whoever it be that teacheth the Postures of the Musketeers, to be very diligent in his instruction, concerning the well managing of their Armes: that they may not only fire to the front, reere and flanks, but that they observe order in their motion, which will better their execution. The File-leader if he have time, may instruct his File in the distances, and the severall motions.

By drawing forth of the files, or otherwise.

The gathering firing.

By drawing forth of the files, or otherwise.

The gathering firing.

HAVING the third time (as formerly) brought your Souldiers into the Field; it is very necessary, in the first place, that they be taught the *Postures* of each *Armes*; either by the *File-leaders*, or some other of the Officers. Wherein they must be careful, to instruct them in the *firings*, both to *Front*, *Reere*, and *Flanks*. As to *give fire* to the *Front*, *advancing*; to *give fire* to the *Front*, upon a *stand*: to *give fire* to the *Reere*, upon a *march*: to *fire* to either *Flank*, *advancing*; or *standing*. As also to instruct them in *distances*, *facings*, *doublings*, *counter-marches*, and *wheelings*; that so, they may be the more apt and capable, when they shall be brought into a *body*. Having spent some time in the *exercising* of *Files*, let the *Drum* summon each *File-leader* to his place; the *Ensigne* be ferche to the head of the *Company*; the *Captaine* command *silence*; and the *Souldiers* tender *obedience*. The *Ranks* being evened, and the *Files* strained, the *Captaine* (according to his accustomed manner) begins to instruct them in the *Distances* and *Motions*. And after the performance of so many of them, as he shall thinke fit for the present *exercise*, he commands the *Drums* to *beate*, and *Muskettiers* to *make ready*; and so causeth them to *give fire*, three or foure severall wayes, after the ordinary manner of firing in the front.

Then cause your Muskettiers of the *left flank*, to *give fire* to the *Reere*; and the Muskettiers of the *right flank*, to *give fire* to the *right*. This *firing* is to be performed upon a *march*, the *Pikes* shouldered.

For the *second firing*, let them *give fire* to both *flanks*. The *gathering firing*.

For the *third*, let them *fire* to both *flanks*, drawing them up betweene the *divisions* of Muskettiers and *Pikes*.

For the *fourth firing*, let them *give fire* againe, to both *flanks*, leading them up after they have fired, betweene the *middle* of *Pikes*. When the last *files* are firing, advance your *Pikes*, and close your *ranks* forward to their order. Then, face to the *right* and *left*, and charge *Pikes*. Your *Pikes* being advanced, and faced againe to the *front* proper: all your Muskettiers will be in the *middle*.

Then open them some *Intervals*, and let the first firing be to the *Front*, *wheeling all off* to the *right*, and placing themselves in the *Reere* of their owne *divisions*. Then cause the *Pikes* to charge, and when your *Pikes* are advanced againe, let your halfe *Files* face about to the *right*.

And so the *sixth firing* may be to the *Front* and *Reere*; the Muskettiers of the *front division*; *wheeling off* to the *right*: those of the *Reere division*, *wheeling off* to the *left*: either of them placing themselves in the *Reere* of their owne *divisions*. The Muskettiers having fired once or twice over, *wheele* your *flanks* into the *front* and *reere*; and cause your *Pikes* to charge to the *front* and *reere*. The *Pikes* being againe advanced, and all faced to their former *front*, wheele *front* and *reere* into both *Flanks*, and face as before.

For the *seventh firing*, make the *Plumbum*, or foure fronted *Battell*, the *Angles* being filled with *Pikes*: and let them *give fire*, and charge their *Pikes*, according to directions for that Figure. As likewise the firing being ended, reduce the men backe into their *places*, as they were before this firing began. Then, *wheele off* your *front* by *division*, which brings your Muskettiers up in the *flanks*; but doth not reduce your men justly into their places, if your *number* be any thing great.

From thence, make them a perfect *crossed battell*, and let your Muskettiers *give fire*, *wheeling all off* to the *right*, placing themselves in the *reere* of their owne *divisions* of Muskettiers.

For the *ninth firing*, let them *give fire* as before: but place themselves in the *reere* of their *Pikes*, the *Pikes* moving forward into their ground, and charging. Having advanced your *Pikes*,

the *Pikes* as in chap. 87. \* As in chap. 101. \* The *Plumbum* is in chap. 101. \* The *crossed battell* as in chap. 99. command

command your flank divisions to face about to the right, and to close their divisions. Then command the Front and rear divisions to wheel their flanks into the rear: which being done, face them to the Front proper, (that is) after the right file leaders.

For the tenth firing, (your muskettiers being still in the midst) let them give fire by Introduction twice over, (still beginning with the second rank) the Pikes moving softly forward.

For the eleventh firing, let them give fire by Introduction, (beginning with the bringers up) The Pikes may charge at discretion: then let the muskettiers stand, and the Pikes march forwards: closing their divisions before the muskettiers.

And so let the twelfth firing be by way of introduction. Let the Pikes charge; which being performed, command the first and last four ranks to stand, and the rest of the body to face to the right and left: and so to move, until they are clear of the standing ranks. Then let the whole body face about to the right, and let the Ensign display his Colours in the midst, the body standing in this following forme.

Front.

C

S M M M M M M M S

M M M M M M M M

M M M M M M M M

M M M M M M M M

S M M M M D

D M M M M S

M M M M

M M M M

M M M M

M M M M

M M M M

M M M M

P P P P

E

P P P P

P P P P

P P P P

P P P P

P P P P

P P P P D

D P P P P

P P P P P P P P

P P P P P P P P

P P P P P P P P

P P P P P P P P

L

Rear.

The Muskettiers now being foremost, let the thirteenth be a triple firing to the front, having fired, let them wheel off to the right and left, the front divisions falling in the rear of themselves: the flank divisions in the rear of their Pikes, they moving forwards, and maintaining the Muskettiers ground. The Pikes on the flanks may charge: the Muskettiers of the front division had need be halfe Pike-men, that so they may defend themselves from the horse.

For the fourteenth firing make the Crown battal: for the producing whereof observe these following directions. First, command the four middlemost ranks, of the flank divisions face to the right and left outward and move clear of the standing parts. Secondly, command the four innermost files of the front and rear divisions to move forwards until they stand clear of the same forms: This being rightly performed, this following figure will be produced.

V 3.

Front



Front.



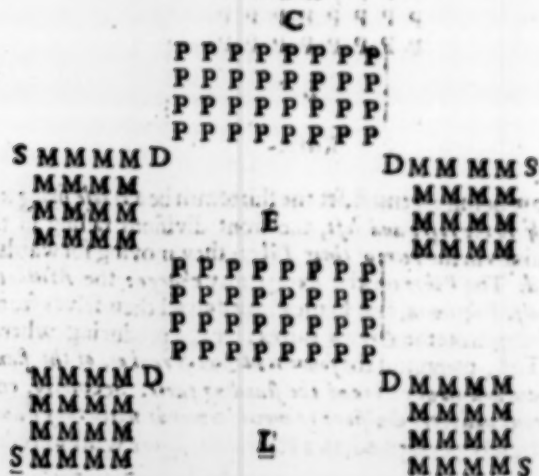
Rear.

In this *forme* you may give fire to the Front, or to the Front and Rear at discretion: having performed what you hold requisite on this *figure*, close the divisions backe againe into their places, (that done) face the two *flanke divisions* to the right and left inward, and let them close in like manner. This makes your *body* sixtene deepe, foure rankes of *Muskets* and foure rankes of *Pikes*, then foure other rankes of *shots*, and foure of the contrary *Armes*. Next, *wheele* off your *Front* by *division*, and close them againe; this, nothing altereth the *forme*, but onely brings the inside outward.

Or wheele  
your front  
inward to  
the Rear.

For the fifteenth *figure*, first command the *Muskettiers* to face to the right and left outward, and move cleere off the *Pikes*, then stand and the *whole body* face about to the right, the *Captaine* going to the head of his *pikes*, shall there finde all his proper *file-leaders* faced towards him, and the *whole body* in this following *forme*.

Front.



Let



Let the Muskettiers give fire to the *Rear*, and both *flanks* marching. They may give fire and keepe their figure, or they may give fire and *flank* their *Pikes*: If the latter, then command the *Rear* division close forwards, and all is reduced as at the first. If the former then all the divisions *disband*, are to close forward. And herewith we will conclude our third dayes Exercise, and lodge our *Colours*, untill that the bellowing *Drum* call us the fourth time into the field, to give an account of our proficiencie. Till when, we will leave our *Souldiers* to repaire to their quarters, rest their limbs, refresh their spirits, and replenish their handierrs.

## CHAP. CXVII.

## The Fourth dayes Exercise.

HAVING the fourth time brought your *Souldiers* into the field, and (as formerly) caused them to be instructed in the Postures (both of *Musket* and *Pike*) that so they may be capable to use them both with *agility*, and with *safety*. As likewise taught them their divers wayes of distance, with the severall and various motions; not forgetting, particularly to instruct them with *rules* and *pertinent reasons* to every one of them: that so they may, not onely learne to do, but like *rationall men* understand what they doe. Which being deliberately performed, and each Officer disposed to his severall place, the *ranks* being *evened*, and the files *straightened*: the *Captaine* commands, the *Drum* beats, and the Muskettiers make ready for skirmish, &c.

The first firing, being by drawing forth the *innermost files* of each *flank* of Muskettiers, to the *Right* and *Left*, obliquely before the *Front*, and so to stand and give fire. Having given fire, let the *bringers up* lead them backe into their places. And in the meane time, let the next *innermost* Files lead forth and fire, after the same manner; and so likewise the rest, untill all the Muskettiers have fired once over that way.

For the second firing, let them give fire obliquely, and *cross* the *front*, both at once.

For the third, let them give fire obliquely the Muskettiers standing before the *Pikes*, in forme of an *hollow wedge*. Upon this firing the Muskettiers fire *outward*: whereas in the other they fire *inward*.

For the fourth firing, let them fire upon the oblique *W*. For the manner of these Firings, with the wayes both how to make them and reduce them, I referre you to their severall places, where I have shewne them plainly.

For the fifth firing, let them give fire obliquely on the *Fort-battall*; that is to say, to *Front*, *Rear* and *Flanks*. These oblique firings howsoever that some of them may at sometimes be usefull, yet here they are inserted but for variety of exercise, and no otherwise to be accounted of. In all these oblique firings the *Pikes* never come to charge, but stand either in a *hollow* or *solid square* in danger of the *Enemies* shot: themselves neither being able to offend the enemy, nor to defend themselves. And yet if by frequent practise they were inured to the use of the long bow fastened to their *Pikes*: I make no question, but that, when they should become expert in the use of the bow and *Pike*, they would not onely be a terror to their enemies, by the continuall showers of *Arrows* which they would send amongst them; but also they would be a great meane to rout their *Battalions*, and utterly break their order. On the contrary, if men should be put to use the bow and *Pike*, and have not first well learned the use of the *Pike* alone, they would be so cumbersome to themselves, and so troublesome to others; that instead of spoiling their enemies, they would rout themselves. But pardon this digression, whilst I proceede to the rest of this dayes Exercise.

The sixth firing, being in forme of a *Roman T* is to be made as followeth. Let the *Pikes* stand, and the *flanks* of Muskettiers wheel into the front: then let them give fire, making an Intervall upon each *Flank*, the Muskettiers of the right *Flank* wheeling off to the *right*, the Muskettiers of the left *Flank* wheeling off to the *left*.

the left flank to the left; and placing themselves in the rear of their own divisions. When the muskettiers have fired, once or twice over, let the pikes pass through, and wheel their fronts into the midst, and then facing to the front let them charge their pikes: and from thence having advanced their pikes, let the Column under pass to the right flank: and face the whole body to the right. Then wheel the battell about to the left, until the body be brought into a round battell: from whence we will begin the seventh firing.

A quaint  
Reduction for  
knowing  
Companies  
but not for  
a large or  
ignorant  
number.

The Figure being made, face the whole body to the Center, and give them their directions, what they have to do. When they have received their instructions, let them all face about to the right, present, and give fire. The first time of their firing, placing themselves in the rear of their own Muskettiers; The second firing, countermarching to the right, and placing themselves in the rear of their pikes: the pikes at the same time, are to move forwards into the muskettiers ground; where they may charge over-hand, and (if need be) at the foot of the Muskettiers giving fire over them as in the Convex half-moon. The firing being ended, and the Pikes advanced, let the Commander march forth of the round battell: at that part where he shall find all his proper file-leaders. Then let the whole body be faced to that part, and the file-leaders caused to march forth, even a breast, the Muskettiers and Pikemen following their leaders, and marching until the body have attained their orderly square againe. But note, that all your Muskettiers are in the midst of the battell.

The eighth  
firing is the  
impaled  
solid  
square.

For the eighth firing, make the impaled solid square: the way to performe it, is as followeth.

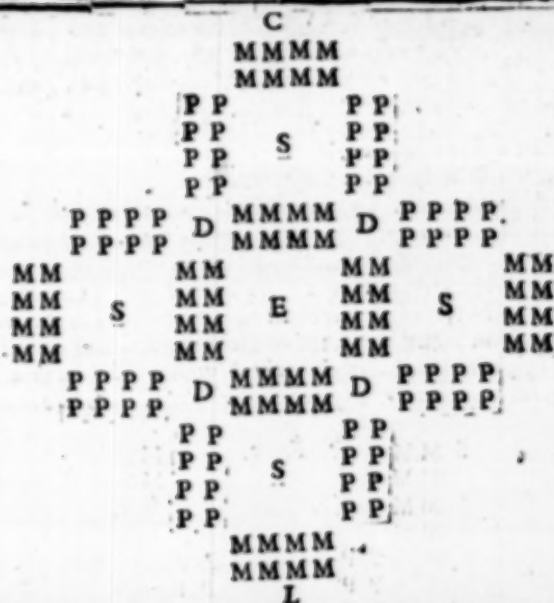
Your Pikes being now the flankers, draw forth the moiety of the files of pike-men from the right flank, crosse the front of the body (taking the outmost Files) let halfe the Files of Pike-men of the left Flanke, be drawn crosse the rear, following their bringers up.

Then, face all your muskettiers to the front, rear, and flankers. The pikes may charge all over-hand: and (if need be) at the foot with their swords drawn: the Muskettiers Firing over them. Having Fired, charged, and advanced their Pikes, draw off the Pikes againe, from the Front and Rear, into their places.

The hollow-fronted  
Crosse, the Muskettiers making the hollow, is demonstrated in cap. 100.

For the ninth Firing (the Muskettiers being still in the middle) make the hollow-fronted-crosse battell: the Pike-men making the hollow, upon the flanks of the Muskettiers. For the making whereof, wheel the front of the 2. first ranks, into the midst. That being done, wheel the rear of the 2. last ranks, after the same manner: and then face the rest of the body to the right and left, and cause them to march until there be a square hollow in the midst of the battell. Then command them to face to the front, rear, and flankers: which being in like manner performed, cause the pikes (who are now in the front of the Muskettiers) to open to the right and left; the last ranks of Pikes ranking even with the first ranks of Muskettiers. The Muskettiers may give Fire upon this Figure, wheeling all off to the right: and placing themselves in the rear of their own divisions of Muskettiers. If need be the Pikes may charge to the angle, whilst the Muskettiers give fire straight forwards. This being done, and the pikes againe advanced; for the tenth figure make the quintupled hollow square, by commanding the two first ranks of each division, move forwards cleave off the Pikes, which produceth this following Figure.

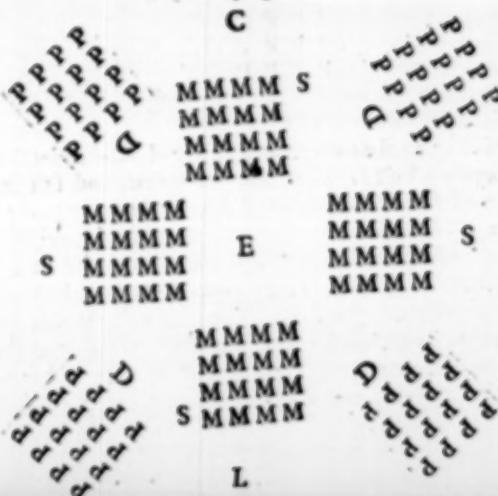
When



When you would come to firing cause the Muskettiers in the midst, to close to the Front, Retr, When the Muskettiers first give good their ground; the second time of firing over, they are to range even with the Pikemen; the fire, they third time of firing, the Pikemen move a little forward, and the Muskettiers lose ground: which will stand in brings them againe into the hollow fronted Cross; all the while the Muskettiers are giving fire, the forme of the Pikemen are to port and charge to the Angle. Having advanced your Pikemen, Command them to close their divisions before the Muskettiers; that done, Command all the Pikemen to face so the bears the fight, and move into the space between the Angles of the Muskettiers, which produceth this following Figure, from whence we will make our eleventh firing.

gured;

Front proper.



X

9

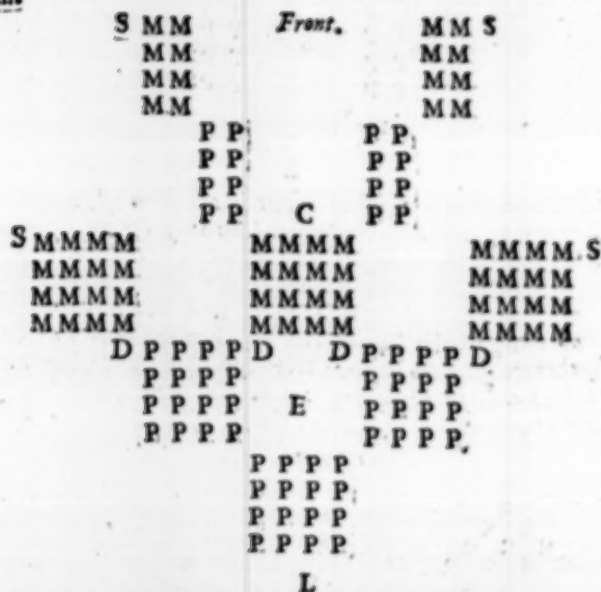
The ele-  
venth firing

On this double crosse battell, you may if you please give fire to the front, reere, and flanks: it is an excellent Figure for Muskettiers with Halfe-pikes, for that they may move forwards and ground their halfe-pikes, and then give fire, *one, two, three, or, four Ranks* together wheeling off, and maintaining the place where their halfe Pikes are grounded (Palisado wise) or they may fire and retreat, into this figure, and there make ready and fire again: the Pikes may charge, &c.

When the Pikes are againe advanced, let them move to the left into their places before the Muskettiers, and the whole body face to the Front.

And when  
they be open-  
ed, let the  
Muskettiers  
move for-  
wards, as in  
the Figure

To make the twelfth Figure, first Command the Muskettiers of the flanke divisions to interchange ground with their Pikes, and then to move forwards until the reer be advanced, even with the front angle, of their owne Pikes. Secondly, command the Muskettiers of the front division, to steeve up to the right and left of their pikes, untill the Reere be advanced, even with the Front of Pikes. Thirdly, command the Muskettiers of the reer to move forwards, and range even with the Muskettiers of the flanke-divisions. Fourthly, command the Front-division (as well Muskets as Pikes) to open to the right and left, leaving an intervall for the Muskettiers behind them. Lastly, close the Pikes forwards in the reere, that their Front may be even, with the Reere of the two other divisions. The Figure followeth.



The Body standing in this Figure, the two front divisions of Muskettiers may give fire once or twice over, and then flanke their Pikes: They may fire againe, and fall in the Reere of their Pikes. One, two, or three of the other divisions of Muskettiers may move forwards, and give fire: the two front divisions of Pikes in the meane time charging. Having fired twice or thrice over at discretion, the two middle divisions of Pikes are to move forwards, to port and charge; the Muskettiers in the meane time firing and losing ground. By which means the flanke division of Muskettiers will againe flanke their Pikes. Then, because we will come to reduce our. First, command the middle division of Muskettiers (the which pertaine to the Reere) to move back into their places. Secondly, command the two front divisions to close together. Thirdly command the Muskettiers and Pikes of the flanke divisions to interchange ground, and then close their divisions:



divisions. Fourthly, command the front and reere divisions, to wheel their *Musquetiers* into the midst. Lastly, *wheel off your battell by division*, after which, having closed their divisions, they are perfectly reduced as at first. And herewith we will conclude this dayes Exercise, and leave our *Souldiers* to rest: untill that the morrow's Sun, and the thundring Drum, shall call us forth againe into the Field.

## CHAP. CXVIII.

## The fifth dayes Exercise.

HAVING the fitt time brought your *Souldiers* into the Field, if you have leisure, it will not be amiss for to cause them to bee instructed (in the first place) in the *postures* of the Pike and *Musquet*. For those *Souldiers* which by often practise of their *postures* are grown perfect, will manage their *Armes* with ease, *surety*, and *celerity*: when on the contrary, the unpractised *Souldier*, will be a trouble to himselfe, a danger to his fellowes, and a dormant to his *Enemies*.

After the *postures*, each file being drawne into his place; and the *Ensigne* (according to the former directions) brought to the head of the *Pikes*; the ranks evened, and the files straightened; the *Captaine* having commanded *silence*, and delivered himselfe in such termes as the present occasion doth require, ever preferring the industrious and painfull; and on the contrary, blaming the careless and the slothfull) he next proceeds to instruct them in their severall distances: and these, indeed are the ground of all motion: seeing that without distance, the motions cannot be executed. Next to the distances, they are to be instructed in the motions, ever observing to each motion its due distance.

Next after *postures*, distance, and motions; let the rest of the daies Exercise be spent in *figures* and *figures of Battell*. Each *Officer* having now received his severall Charges: The *Captaine* commands: the Drums beat, and the *Musketiers* make ready.

Let the first firing be performed by leading forth the outermost file of each flank, twenty or thirty paces before the front. When being come to the place of firing (where they may surely doe execution) let them ranke *four*. That is to say, the three men next behind the right-hand file-leader, shall ranke inward to the left, even with their file-leaders: the three next men after the left-hand file-leader ranking inwards to the right; even a breast with the leader of their file, the residue of each file, keeping themselves in file, and closing forwards to the distance of order, just after their file leaders. The first foure of each file having presented, fired, and wheeled away; the last foure men (being the Reere half-files) in the interim of their wheeling off ranke to the right and left inward: presenting, firing, and wheeling off, (as aforesaid) and placing themselves in the reere of the former part of their files, which wheeled away before them. The second files are then to lead forth and to do the like; and so successively, the rest, untill they have all fired over, this way.

For the second firing, let the outermost files lead forth to the same distance before the front, whichever being come, as to the place wherin to do their execution, let the files ranke to the right and left inward; and so fire altogether: wheeling off, and placing themselves as in the former firings. The residue of the other files of *Musketiers*, at the same time, marching forth, giving fire, and still placing themselves filewise, on the innermost part of their own divisions of *Musketiers*, and next to the outside of *Pikes*.

For the third firing; send forth the foure first ranks about ten paces before the front: Let the two first ranks present together, the second ranks closing forwards, and presenting between the Intervalls (or spaces) of the first ranke, and so pour out their shot together. When they have given fire, let the first ranks first wheel away, the third ranks following them. The other two



*rank, closing, presenting, firing, and wheeling away, as aforesaid, falling in the Reere of their own Division of Muskettiers.* The next four Rankes moving forward, and doing the like, &c.

Let the fourth *firing* be performed to both *flankes* upon a stand: *facing* the whole *body* to the right and left, there *firing, wheeling off by Division*, and flanking their Pikes. Whilest the two last Rankes are giving fire, let the Pikes *port*, and when the Muskettiers have fired, and *wheeled off*, let them *charge*.

Having *advanced their Pikes*, face the whole *Body* to that part where you shall finde your file-leaders of Muskettiers: then will all your Muskettiers be in *front and reere*. Next, command your half-files that then are, to double *your front* to the *left entire*: which being done, this following *Figure* will be produced.

C.

```

S P P P P P P P D M M M M M M M M S
P P P P P P P M M M M M M M M
P P P P P P P M M M M M M M M
P P P P P P P M M M M M M M M
D E D
M M M M M M M P P P P P P P P
M M M M M M M P P P P P P P P
M M M M M M M P P P P P P P P
S M M M M M M M D P P P P P P P P S

```

L.

*This is the  
fifth firing.*

The Muskettiers may give fire on this *Figure*, to the *Front and Reere*, or to the right and left: The firing by me intended is to both *Flankes*; to which purpose *face the Body* to the right and left by *division*. Let the Drumme beat, the Muskettiers *make ready, present, and give fire*, all *wheeling off* to the left, and placing themselves in the *Reere* of their own divisions. The Pikes may also *Port*, and *charge* as they see occasion. The Muskettiers having all *fired*, the Pikes againe advanced, and the whole Company faced to their former *Front*, Command the *half-Rankes* of the right (both Muskettiers, and Pikes) to *march*, and the half Rankes of the left flanke to follow in the *Reere*.

*Half Rankes  
of the right  
or left flank  
both intend  
the same  
thing.  
The sixth  
firing.*

Having given them some time of breathing, then for the *sixth firing*, cause the *half-files* that then are, (Muskettiers and Pikes) to *face to the Reere*. Which being done, let the Muskettiers give fire to the *Front and Reere*, upon a stand, *wheeling off by Division*, and placing themselves in the *Reere* of their Pikes; they *moving forwards*, and maintaining the Muskettiers ground. The Pikes are then to *charge*, when they are cleared of their Muskettiers. Which being done, and they againe advanced, *face them all to their former front*.

*The seventh  
firing.*

For the seventh firing, Command *half-files* to double the *front inward, entire*. To which purpose, upon the *front half-files* (both Muskettiers and Pikes) to the right and left; for receiving the *half-files* of both *Armes* within them: which being executed, each *Armes* will stand in three *divisions* as you may perceive by this following *Figure*.

When.

C

S P P P P D M M M M M M M D P P P P S  
 P P P P M M M M M M M P P P P  
 P P P P M M M M M M M P P P P  
 P P P P M M M M M M M P P P P

E

M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 M M M M P P P P P P P M M M M  
 S M M M M D P P P P P P P D M M M M S

L

When you intend to give fire, Command the *halfe files* to face about, and performe the firing to the *front and reere*, wheeling off by *division*, and placing themselves in the *Reere* of their *owne divisions*. The *Pikes* may charge at discretion. Having advanced your *Pikes*, and faced the *whole Body* to you. Let your *eight firing* be upon the *Checker Battell* (of eight divisions.) To make the which, Command *Left flanke double the right flanke* by *division*. This Command being executed, the *Checker Battell* is finished, you may give fire upon it to the *Front*, *Reere*, and *Flanks*, either *standing*, or *marching*: the *Muskettiers* still placing themselves either after, or within their *owne Divisions* of like *Armes*. The *Pikes* may also charge, as you see occasion, &c. Many *formes* might be made from this *Checker Figure*, the which for the present I omit: Therefore, Command the first and last four Ranks to face to the left and march being moved cleere of the standing part of the *Body*, let them close their *division*, and face to the *Front* againe: this brings them into six *divisions*. Next, Command the eight innermost files to face about, and march into their places. The *halfe files* being faced about, and marched cleere off: then are the *Front halfe files* to close their *divisions*; this being performed, and all rightly faced, the *Muskettiers* will be in the *midst*, and the *Pikes* on the *front and reere*. Let your ninth firing be to the *reere* and right flanke together. And to that purpose: First, Command *halfe files double your front*, to the right insire: that being done, Let the *halfe-files* that doubled, wheele their *Battell* to the right, and then being faced to the front, they will stand as in this following *Figure*.

E

C

S P P P P P P P D P P P P D M M M M S  
 P P P P P P P P P P P P M M M M  
 P P P P P P P P P P P P M M M M  
 P P P P P P P P P P P P M M M M

M M M M M M M M P P P P M M M M  
 M M M M M M M M P P P P M M M M  
 M M M M M M M M P P P P M M M M  
 S M M M M M M M D P P P P D M M M M S

L

As the *Body* now stands faced you may conceive a firing to the *reere* and right flanke marching: the which may be performed these two severall waies, \* The *Muskettiers* of the *Reere*, having fired may wheele off, to the right, and place themselves next after the *Pikes* in the *Front* of their *owne Divisions*. The *Muskettiers* of the *Right flanke*, having at the same instant fired, may place themselves in the inside of their *owne Divisions* through,

These 8. innermost files, are the halfe files of Muskettiers and Pikes which doubled the front inward insire.

\* Note that there must a division be made betweene the midst of the Muskettiers

and Pikes of the left flank for the Muskettiers to move

next the Pikes. A second way to place themselves, after that they have given fire, is this: the Muskettiers which fire in the *Reere*, are to place themselves before the *front* of Pikes; the Muskettiers of the *flank* place themselves on the inside of the *right flank* of Pikes. The whole body may stand, and Pikes charge to the *Reere* and *right flank*. If on this Figure you would give fire standing, then face the *right flank* to the *right* and *left flank* to the *Reere*: and open an *Intervall* in the middle of the *left flank* for the Muskettiers to move thorow. The first time of their firing the Muskettiers may place themselves in the *Reere* of their own division of Shot. The second time, they may flank their Pikes whil'st they port. The third time, they may fall in the *Reere* of their Pikes, they in the meane time charging. Let the tenth firing be performed by way of *Extraduſſion*: the which being done, the Pikes having charged, and being againe advanced: First, Cause those that stand faced to the *right*, to wheele their Battell backe againe to the *left*. Secondly, Command the *left flank* to march, and the *right flank* to follow on the *Reere*. This brings all your Muskettiers into the *Front* and *Reere*.

Having suffered your Souldiers to have a breathing time, come to the eleventh Firing. To make the Figure, first Command, *front halfe files* (as well Pikes as Muskettiers) open to the *right* and *left* to a convenient distance, (to receive another division.) Secondly, Command *halfe files* of Pikes move to the *right* and *left* untill you stand cleere of the Pikes before you. Thirdly, Command the foure innermost *Files* (of the *Reere* division) of *Muskets* move for wards to the *Reere* of the *Intervall* betweene the Pikes. Fourthly, Command the two last divisions of Pikes, open to the *right* and *left*, and make *Intervalls* for the two divisions of Shot in the *Reer* to passe through: that so they may range even breast with the *Front* of Pikes. These Commands and directions duely executed, produceth this following Figure.



On this Figure we will give Fire to the *Front*, the two first divisions may begin the firing, and the first time fall in the *Reer* of their own divisions of Muskettiers; the second time of their firing over, they may place themselves in the *Reer* of the Pikes: the Pikes may charge, and the *Reer* division of Muskettiers may move forwards, being advanced into convenient ground, they may present and give Fire, together with the two division of Shot, on the wings. Let them fire and gaine ground, let them fire and maintaine ground, let them fire and lose ground, falling backe into the *reere*, behinde the *Intervalls* of their Pikes. All the Pikes having charged may advance. By this time sable night begins to appeare, and therefore we will come to *Reducement*. First, Command all the Muskettiers to close their divisions. Secondly, Cause the two *Reere* divisions of Pikes, to close to the *right* and *left* inward, and the two *front*-divisions of Pikes close to the *right* and *left* outward

The reducements.  
The Muskettiers may  
some close  
their divisions  
by reason  
they  
stand near  
together,  
being so left  
in this firing

onward, just before the other *divisions* of *Pikes*. Thirdly, Command the *Muskettiers* to move forwards and even their *front* of *Pikes*. All this being done, your *Muskettiers* are in the *midst*, and the *Pikes* on their *flanks*. Now if you please to open the *Muskettiers* to the *Front* and *Rear*, it will make a hollow square for the *Ensign* to display his *Colours*. If you will come presently to *Reduction*, Command your *Muskettiers* and *Pikes* to interchange ground, and all will be perfectly reduced as at first. Therefore now let us lodge our *Colours* with our accustomed *Bene vale*, and conclude our fifth daies *Exercise*: suffering our *Souldiers* to depart to their severall habitations. There leaving them to *cleanse* their *Armes*, and to refresh their *bodies*, untill the *Morrowes Clamoring Drumme*, invite againe into the field.

## CHAP. CXIX.

## The sixth dayes Exercise.

HAVING the sixth time brought your *Souldiers* into the field, according to the accustomed manner: let each *File-leader* exercise his *file*, in the *Postures* of such *Armes* as they carry. Which being performed, and the *files* againe rejoynd into one *Body*: the *Ensign* being at the head of the *Pikes*, and the rest of the *Officers* in their severall places. The *Captaine* having commanded *silence*, *attention*, and *obedience*, (three especiall properties, most necessarily requisite to every *Common Souldier*) he proceeds to the severall distances; instructed them in the *uses* of each of them. Next after the distances, he teaches them the *facings*, the *Doublings*, the *Counter-marches*, and the *Wheelings*, with severall observations upon each of the *motions*. After which (having so commanded.) The *Drummes* beat, and the *Muskettiers* make ready for *Skirmish*. Then (if you please) you may cause three or foure of the first *firings*, to be performed by *light skirmishing* before the *front*: and that with *loose ranks* or *files*, or both: either some of those, (or such like) as I have formerly spoken of in the preceding *Exercises*. After which, for your next *firing*, cause your *halfe* *silence* to open to the *right* and *left*, by *equall division*: untill the *Rear* divisions of *Pikes*, stand right after the *Muskettiers* of the *front* division. Now the *Muskettiers* standing in foure *divisions*, let them all present and give fire to the *front*: wheeling all off to the *right*, and placing themselves in the *Rear* of their owne divisions of like *Armes*: each *Ranke* still making good the *Leaders* ground. Having given fire *once or twice* over on this figure: For the second *firing*, cause the *Front*-division to give fire to the *front*; and the two *Rear*-divisions, to each *flanke* in a *march*. The *front*-division which fires in *Ranke*, wheele all off to the *right*; placing themselves in the *Rear* of their owne divisions of *Muskettiers*: the other *Divisions* which fire in *flanke*, leading up their *files* betweene their owne *Divisions* of *Muskettiers* and the *Pikes*.

Having given fire *once or oftner* over, according to discretion this way; let the third *firing* be performed upon a *stand*. For the which, cause your *rear*-divisions to face to the *right* and *left* outward: the *Front*-division, still to continue the same *aspect*.

Then, Let the *Muskettiers* give fire, those of the *right flanke*, wheeling off to the *right*: and the contrary *flanke*, to the contrary hand; the *Muskettiers* of the *front*-division, placing themselves in the *Rear* of their owne divisions of *Muskets*; the *Muskettiers* of the *Rear*-divisions, placing themselves in the *rear* (of the *rear*-divisions) of *Pikes*. When they have fired all over, let the *Pikes* charge, to *front* and both *flanks*.

Having advanced your *Pikes* againe, and faced your *Body* to the *front* proper, each *Armes* still standeth in three *Divisions*. Then let the fourth *firing* bee to the *Rear* and both *flanks* upon a *march*. And to that end, open your *front* divisions of *Muskettiers* to the *right* & *left*, untill they are cleere of the *Rear* divisions of *Pikes*: that so they be not troublesome unto them in their *march*. Then let your *Pikes* shoulder; and the *Muskettiers* give fire: the *front*-divisions of *Muskettiers*, firing in *flanke*, and leading up on the inside of their owne divisions. The *Muskettiers* of the *rear*-divisions

The first firing is by four divisions to the front.

The second firing is to the front & both flanks marching.

The third firing is to the front and both flanks standing.

The fourth firing is to the rear & both flanks marching.



The fifth firing is to the reere and both flanks standing.

division giving fire in the *reere*, in *rankes* wheeling off by division, and placing themselves in the front of their owne divisions of *Muskettiers*. Having fired once over and the *pikes* charged; let your fifth firing be to the *reere*, and both flanks upon a stand. In the which, let the *half-files* (both *Muskettiers* and *Pikes*) face to the *reere*; the front-division to the *right* and *left*, and so give fire on each part: those that fire to the *flanks* wheeling off, and placing themselves in the *reere* of their divisions of *pikes*, and the *Muskets* of the *reere*-divisions, wheeling off to the *right* and *left*, and placing themselves in the *reere* of their owne divisions of *Muskettiers*: each *ranke* moving forward into their *Leaders* ground. Having fired over, let the *pikes* charge. The *Pikes* being againe advanced; face the whole body to the proper front: and then all the *Muskettiers* will be in the midst, and the *pikes* on the flanks.

The sixth is a firing tripartite as in Cap 54.

For the sixth firing, Cause your halfe-rankes of the left, double your right flanks by division. For further directions, looke backe to the tripartite firing: which you shall find, Chap. 94. Having fired over that way; charged, and re-advanced your *pikes*, face the whole body to their former front.

The seventh is a firing to both flanks in three divisions.

For your seventh firing, cause the front and *reere* divisions of *Muskettiers* and *Pikes*, to face to the right: the rest of the body (both *Muskets* and *Pikes*) to the left. Let the *Muskettiers* give fire, and wheele all off, either to the *right* or *left*, and place themselves in the *reere* of their following divisions of *Pikes*: each *ranke* still moving up into their *leaders* ground. When there rest but two rankes of each division to fire, let the *Pikes* port. Having all fired and wheeled away, let the *Pikes* charge. Then face the whole body to their first front; and command the first and last four rankes to face to the left: and to march, untill they are cleere of the standing part of the Body. Then, cause the front half files to face to the left, the *Rear*-half-files, to the right; and so to close their divisions: and after that to face towards their Leader.

Thispe firedly between the whole body; every man to his place. The eighth firing is the solid square girded with shot.

For the eight firing, make the solid square, girdled with *Muskettiers*. For the which draw halfe the files of the right flanke of *Muskettiers* crosse the front, and halfe the files of *Muskettiers* from the left flanke crosse the *Reere*. Then face the whole body (both *Muskets* and *Pikes*) to the front, *reere*, and flanks. This done, let the *Muskettiers* give fire, and wheele off by division: placing themselves in the *Reere* of their owne division of *Muskettiers*.

Then: the firing is to the front and reere upon Capitaine Wallers double figure.

All the time of this firing, the *Pikemen* being in the middle of the *Muskettiers*, have good opportunity (if the enemy be nere) to gall them with their thick showers of feathered shot. The *Muskettiers*, in the meane time, having fired once, twice, or oftner over, on this Figure, draw your files of *Muskettiers* back againe into their places.

The ninth firing is to both flanks standing. The bringer up being now the fire-keepers. The eleventh firing is on the diamond figure.

Then having faced the whole body to the proper front, let your ninth firing bee [Capitaine Wallers double firing] to the front and *reere* after this manner.

First, Wheel front and *reer* into the right flank: then face them all the same way they were before: which done, Cause the *half-files* to face to the *reere*, and command the *Muskettiers* which are in the *reere* of each division of *Pikes*, to double their front of *Pikes* by division. Then, Let them face about and close their divisions: and so having refaced them as they were; let them give fire, wheele off, and charge, according to directions on Capitaine Wallers Figure.

For the tenth firing, let them face to the *right* and *left*, and give fire to both flanks upon a stand: wheeling off by division, and flanking their *Pikes*.

When the *Pikes* have charged, and are againe advanced, let the Capitaine passe to the front accidental of the left flanke, and face the rest of the body to him, and in the next place wheele their flanks into the front, and so all the *Muskettiers* will be in the front: and by facing the whole body to the left, all the *Muskettiers* will be on the right flanke.

Let the eleventh figure bee the Diamond Battle. Having given fire two or three severall waies, according to the directions upon that figure; charged *pikes*, and reduced them againe into the Square; face the body about to the right: and passe the *Muskettiers* which belong



to the right flank, between the ranks of Pikes into their places. Then the Muskettiers of the left flank being closed to their Pikes, the Body will stand at their first Order.

For the twelfth firing, make the hollow Square girdled with Shott; let them give fire upon that Figure (both without and within) according to the directions for that firing. Let the Pikes charge; and reduce them in the same manner, as I have discoursed upon that Figure.

For the thirteenth firing, make the *Platoon* as you shall find directions in the 106. Chapter.

Having made it, given fire upon it, and reduced it as at first.

Let the fourteenth and last firing for this Exercise, be the *Hollow Hears and Crosse*. Turne backe to the 104. Chapter, where you may find ample instructions for the making, firing, and reducing of it. And lastly, That you may conclude with triumph, cause your *Ensigne* to be displayed in the middle of the *hollow Crosse*; and then having fired, charged Pikes, and reduced your men, according to the directions on that Figure, your men will be as at first. And therefore, seeing that by this time night is come, and our powder gone; we will here give conclusion to our sixth dayes Exercise.

Wherefore that you may observe some forme in the lodging of our Colours, cause your Muskettiers to march in the front of your Pikes. Then, as they march, let them invert to the right and left: which is, when the Ranks file to the right and left by division. Then, cause all your Muskettiers to face in opposition: to cocke their matches, guard their pans, and rest their Muskets. In the meane time, let the Pikes advance, and close their Ranks and Files to their Order. Which being done, the *Captaine, Lieutenant, Ensigne, and Drummes* beating a troope at the head of the Pikes; passe through this guard into the appointed place for the allodgement of the *Ensigne*, file to the right and left outwards. Then, the *Serjants* cause the Muskettiers to face all about to the right, and present: and upon the first beat of the Drum, they all give fire in one Volley. And now having performed our sixth dayes Exercise, the Drumme beats a Call, and makes Proclamation, that every man depart unto his severall home, untill his next Summons into the Field.

## CHAP. CXX.

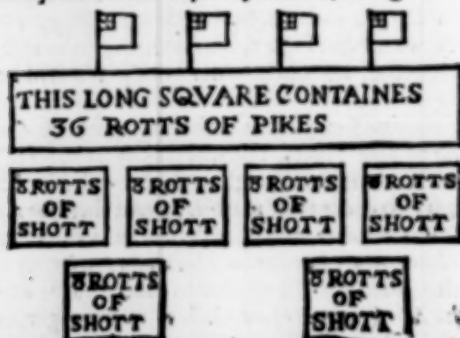
Of the Brigade; the number and way of drawing up a Squadron. Next the composing three Squadrons into one Brigade. And lastly, of imbatalling three Brigades, after the manner of the King of Sweden.

FOR as much as that *Military mirror* of our times, *Gustavus Adolphus* King of Sweden: was found not onely able to wage Wars with the *Imperiall Austrian* bird; But that he forced even to admiration, pluming and tearing the best Feathers from his backe and wings, none of his Commanders, nor *Generalissims*, being able to withstand the torrent of his victories. It cannot be denied but that (next under God) his Discipline, and new manner of Imbatalling was a great (if not the greatest) means for the achievement of the height of his designs. And therefore as in all the former part of my Booke, I have explicated, and set forth the Postures, Motions, Firings, and Figures of Battell; to be practised by Files, Corporallships, Divisions, Companies, Squadrons, and some for larger Bodies. So have I delivered and demonstrated them all by the number of a hundred twenty eight men. Whereby all such as have a fancy or delight in the exercise of the Infantry, may be so enabled to the worke, that they neede not continually pore upon two or three firings, thereby breeding *fatiety*: But with delectation to themselves, and profit to their Souldiers, may exercise their bodies with more varietie. Vnto which purpose, I have also added for the close of this my Booke, the number, and manner of Imbatalling into that forme of the *Swedish Brigade*, which hath proved so fatall a figure to the House of Austria. The knowledge whereof as I assume not particularly to be mine own, but a collection. So the Figure shall be drawn up according to its owne *Termes of Art and Words of Direction*.

And therefore for the better satisfaction of the desirous, we will begin with a *file*, and so proceed untill we have formed a perfect *Brigade*. First, You are to note that *six men* make a \* *Rot*, *Three Rot*s of Pikes makes a *Corporalship*; but the Muskettiers have *four* *files* to a *Corporalship*: *Three Corporalships* of each *Armes* makes a compleat *Company*, that is to say, *nine Rot*s of Pikes, and *twelve Rot*s of Muskettiers, *twenty one Rot*s together, which amounts to the number of *one hundred twenty six men*, besides all *Officers*, *Master-youngs* and *Passelants*, *four* of these *Companies* make a *Squadron*, and *three* such *Squadrons*, formes a perfect *Brigade*. The *Squadrons* are sometimes drawne up as this following *Figure*.

A Squadron or third part of a Swedish Brigade.

One of these  
squadrons  
contains  
306. men  
wh. reof 408  
are some-  
times drawn  
up, as in this  
Figure.  
Sometimes  
they are ar-  
ranged all a  
brest, some  
corporalships  
being drawne  
left in the  
riere as a  
reserve, of  
this more in  
the Intellig-  
gencer.



306. Men a  
compleat  
Company.

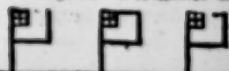
Plottons  
are (small di-  
visions)

Even with  
the front  
but on the  
left flank:

By the standing of this *Squadron* or third part of a *Brigade*: you may easily perceive how apt and ready they are to be *Imbattel*ed into any forme, either offensive or defensive. But because I in this Chapter intend no other variety, but only to shew the drawing up of the *Brigade* it self, therefore proceed we to the demonstration thereof; as it is set forth and expressed in words, By *Colonel Robert Monro*, in his Booke intituled, *Monro his Expeditions and Observations*. His directions in effect, are as followeth.

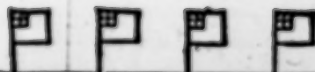
\* Twelve compleat Companies make up three Squadrons: every Squadron of Pikes and Muskets being drawn up severall apart; the Pikes and Colours on the right hand, the Muskettiers on the left. Three Squadrons thus drawne up, compleats a Brigade of Foot, to be divided as followeth. (*viz.*) Eight Corporalships of Muskettiers, being thirty two Rots, divided into four Plottons, every Plotton being eight in Front, led off by a Capitaine, and every division after him led up by a sufficient Officer: till coming to a halt all are drawne in even Front. Next after these, the thirty six Rots of Pikes are to follow, (being twelve Corporalships) with their Colours, a Capitaine leading off the first five Rots, before the four Colours should stirre. Then the Ensignes should lead off the next division, their surers with their Colours following them till they are drawne up even in front with the thirty two Rots of Muskettiers. This makes the right wing of the Brigade. Secondly, The Battell of Pikes moveth forwards in divisions, doing in all respects as the former: untill they range even in front, with the Pikes of the right wing. Then the other 36 Rots of Muskettiers belonging to the middle Squadron, (who are appointed to make the Battell of the Brigade) are to be led up as the first Muskettiers in all points: but to be drawne up at a reasonable distance, behinde the Pikes of their owne Squadron. Thirdly, The last Squadron of Pikes marcheth up, in all respects observing the former order: moving forwards, untill they have attained to range even in Front with the other Pikes. After them marcheth forwards the thirty two Rots of Muskettiers (in four divisions) observing the former directions, untill they are equall in Front with the whole Pikes, which maketh up the left wing.

The Swedish Brig



THIS LONG SQUARE CONT  
36 ROTTS OF PIKES

8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT

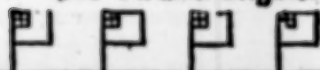


8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT  
THIS LONG SQUARE CONTAINES  
36 ROTTS OF PIKES

Place this between *folio* 164. and 165.

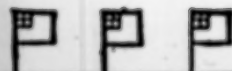
8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT

The Swedish Brigade.

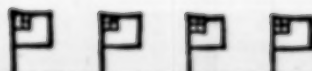


THIS LONG SQUARE CONTAINES  
36 ROTTS OF PIKES

8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT



THIS LONG SQUARE CONTAINES  
36 ROTTS OF PIKES



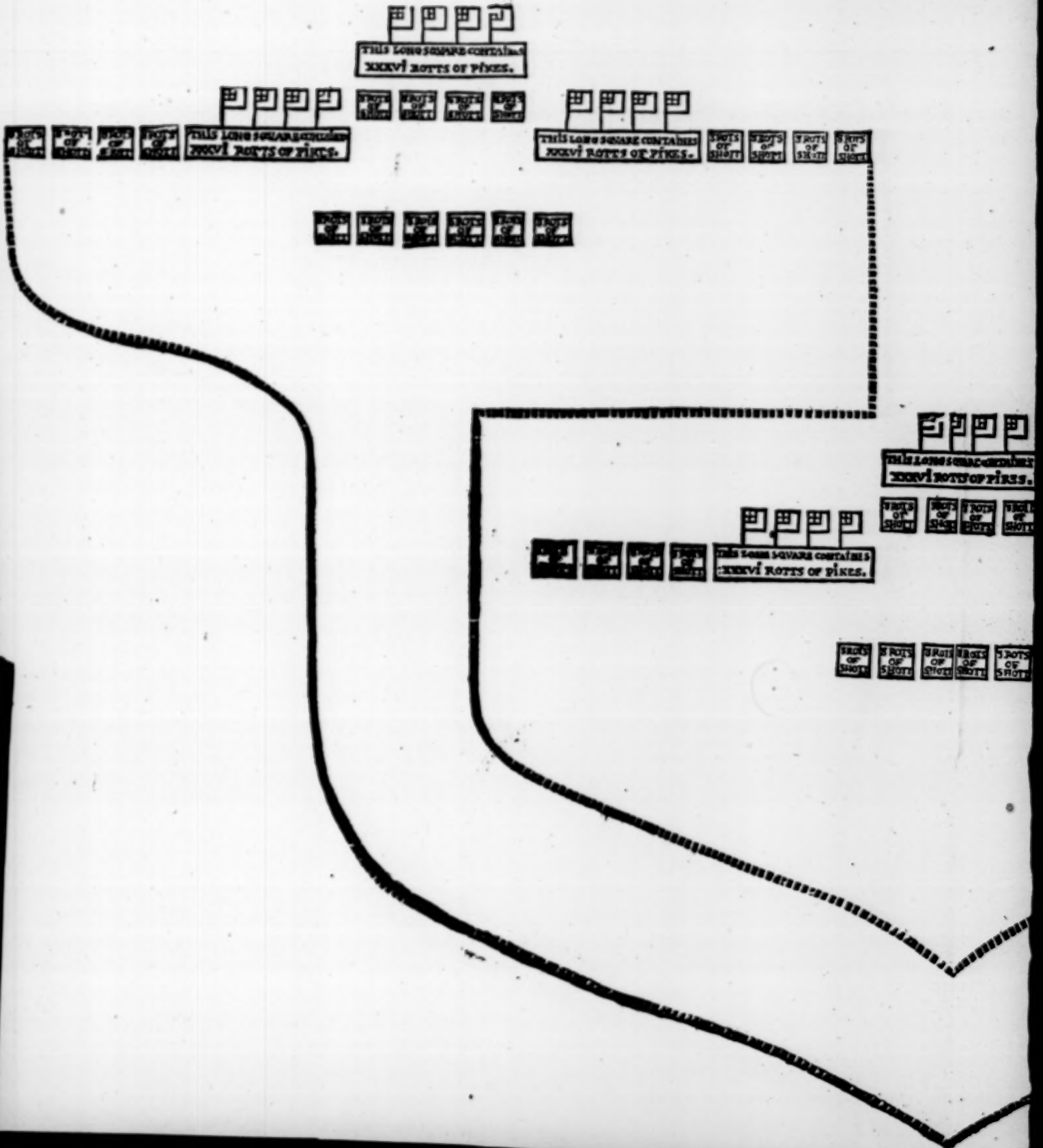
THIS LONG SQUARE CONTAINES  
36 ROTTS OF PIKES

8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT

165.

8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT 8 ROTTS OF SHOTT

¶ THREE SWEDISH  
drawnevp & i







' This being done, the Battell (or middle Squadron) of Pikes and Muskets are to advance fur-  
wards in one Body, till they are clear of the *Pikes* and *Muskettiers* of the wings. Lastly, the  
' surplus of the three Squadrons, being forty eight Rots of *Muskettiers*, are drawne up behind  
' the Brigade: where they are to attend the Commands of their Officers, either to guard the  
' Baggage or Cannon, to be Convoyed to bring Ammunition or Victuals to the rest; or to con-  
' stitute a reserve to wait upon all occasions. Observe the Figure of the Brigade, in this  
' place.

A complete *Brigade* (with Collonell *Mours*) consists of twelve Companies each Company  
containing 126. men. The which is to be understood of full and complete Companies. Other-  
wise, and most usually of two Regiments, eight Companies making a Regiment, consisting of  
one thousand and eight men. So that one Regiment and halfe, of whole and full Companies,  
would perfect a *Brigade*: or two Regiments of torn and broken Companies, the overplus being  
alwaies added to the *Reserve*. Notwithstanding it so hapned at the *Battell of Lutzen*, that *Mours*,  
*Laff*, *Gerstorf*, and *Ross* 1, 3. cruized Regiments, made up but one *Brigade*, being the outmost *Brigade* the  
gade to the left of the second *Range*. And towards night in the same forenamed *Battell*, going  
to rally up the two broken and shattered *Brigades* of yellow and blew, belonging to *Grave Neales*  
and Collonell *Winkels*, there were not men enough left unhurt and killed, wherewith to make one  
squadron (or third of a *Brigade*) to make another charge. Let this suffice both for the number  
and order for the drawing up and making the *Swedish Brigade*. If any be desirous to know the  
places of the *Commanders* and *Officers* of the *Brigade*, there is a draught communicated by my  
Lord of *Reay*, and set forth in the *Swedish Intelligence*.

I should now shew you the manner how the *Muskettiers* performs their firings on this *Fi-  
gure*. The which by all information that hitherto I could gather, have beene these two: namely  
by \* advancing or gaining ground, or by *Salves*. powring on showers of Lead, by firing two  
or three *Ranks* together. I might here adde how usefull a Weapon our halfe Pikes would prove  
in this *figure*: especially if the adverse party had any Horse in the midst, or between his *Re-  
giments*, as it happened *Tilly* to have in his Battell of *Leipsich*. But I willingly forbear, that so  
I might demonstrate the standing of three *Brigades* together in order of *Battell*, according to  
the usuall and accustomed manner of *Intebattell* by that *Invincible King* of Sweden, of never  
dying memory; who placed them as in this *Figure* may be seene. The Battell of the follow-  
ing *Brigade* being alwaies placed directly behind the *Interval*, *Division*, or *space of ground* be-  
twene the two wings of the former *Brigades*.

Even with  
the left  
flank.

The surplu  
of each qua-  
dron & 12.  
Rots which  
together

makes 48.  
Rots.

The Swedes  
have but 2.  
Companies  
in a Regi-  
ment.

Looke the  
Swedish In-  
telligencer.

The descrip-  
tion of the  
Battell of  
Lutzen, pag:  
168. The  
Intelligencer.

\* Introdu-  
tion.

A salve is  
when 2, 3.

or more  
ranks powre

on all their  
shot together

in one vol-  
ley, as wee

usually doe  
with our

halfe Pikes.

This paines, *gentle Reader*, have I taken for thy good, the which if it find a kindly and courteous *Acceptance*, shall be to me a *guardian*, or satisfaction sufficient for my labour and patience. As for the *Envious*, who (*Like the dog in the manger*) will neither eat himselfe, nor willing'y suffer them that would. It may be imputed to their *Cinicall* dispositions: who *square* other mens *endowments*, according to the *crook'd line* of their owne conceits. Condemning things commendable in others: but neither saying or doing any thing considerable themselves. Another sort there be, that would seeme to carry the *port of know's* 'ge about them, yet infected with so much *maliginity*; that being requested of their *opinions*, they will answer with an *Italian shrug*, or some such like *mimike gesture*: thereby insinuating a kind of doubtfullnesse of things amiss, when themselves are not able to *render a reason* of their *dissast*. I have been toucht with the venom'd teeth of a *third sort*. Who have rendred themselves so *irrational*, and *stupidly best* all; that their *taunges* serve them but as *instruments* to wound and *gaine the Reputation* of men, then themselves much more *deserving*. But seeing that to *display their follies*, were but to *soile the purity of my Subject*: I will leave them to the amendment of their errors. Desiring once more of the *Courteous* (and well knowing *Readers*) that they will put a *faire construction* on mine, and the *Printers oversights*: by which they will not onely *demonstrate the goodnesse* of their owne *dispositions*; but put a further *Obligation* upon him that will ever be ready to serve them.

*The Glory be to God.*

FINIS.





# THE CONTENTS OF

Every CHAPTER contained in this B O O K E.

Chap. 1	Page 1	Chap.	Page
<b>C</b> oncerning Postures and handling of Armes.		19	Of doubling flankes by way of Countermarch
The Postures of the Muskets.	Page. 2		23
2 Of the Postures of the Pike.	3	20	Of doubling halfe files to the right intire, to a commodate doubling of halfe-rankes.
3 Of the Drummes.	4		24
4 Of Ranks and Files, their places and digni- ties.	5	21	The difference betweene intire and divisionall doubling, and of doubling half-intire.
5 Reasons for precedency of dignity in Ranks and Files.	6		26
6 Of severall Distances.	9	22	Of doubling the Front inward intire.
7 Of marching a Company in divisions, order, and places of the officers.	11		27
8 Of drawing the Divisions up into a square.	12	23	Of halfe files doubling the front by division.
	13		28
9 What is facing, and the use of the Word, whe- ther to be used, or refused.	13	24	Of doubling the Rere by division.
10 Of facing square, and how to performe it, the usefulness of facing, and the severall parts thereof.	14		28
	16	25	Of doubling the Rere intire, by the front halfe files.
11 Of doubling, the use and parts.	16		29
12 Of inversion and conversion, and of doubling Rankes.	18	26	Of doubling by halfe Ranks intire.
	18		30
13 Of doublings of files.	18	27	Of doubling of flankes by division.
14 Of doublings by Bringers up.	19		31
15 Of doublings of files outward and inward.	20	28	Of doubling Rankes intire.
16 Of doubling by halfe files.	21		32
17 Of doubling, the Rere by front halfe files.	22	29	Of doubling files intire, advancing.
	22		33
18 Of doubling the Rere by Countermarch.	22	30	Of files doubling their depth.
			34
		31	Of Conversion and inversion, with their word of command, and reducents.
			36
		32	Of Files filing in sequence.
			37
		33	Of inverting ranks, or ranks filing.
			v.
		34	Of ranks filing by division, and how usefull.
			39
		35	Of the severall parts of conversion, and how they are to be understood.
			41
		36	Of Ranks wheeling by Conversion.
			41
		37	Of Files ranking in equall parts.
			43
			T 3 ,
			38 The e

# The Contents.

Chap.	Page	Chap.	Page
38 <i>The conclusion of Doublingt.</i>	44	63 <i>Of wheeling the Reere into the midst of the Battell.</i>	64
39 <i>Of Countermarches. The antiquity, and words of direction</i>	45	64. <i>Of wheeling the right flanke, into the midst of the Battell.</i>	67
40 <i>Of the Chorean Countermarch: and the way to performe it.</i>	46	65 <i>Of wheeling the left flanke into the midst of the Battell.</i>	68
41 <i>Of Countermarching to loose ground.</i>	47	66 <i>Of wheeling front and reere into the midst of the Battell</i>	69
41 <i>Of Countermarches to gaine ground, or the Macedonian Countermarch.</i>	48	67 <i>Of wheeling the flankes into the midst of the Battell.</i>	70
43 <i>Of the Bastard Countermarch.</i>	49	68 <i>Of making men file-leaders successively: the files being eight deeps.</i>	71
44 <i>Of Countermarching Rankes, to maintaine ground.</i>	ibid.	69 <i>Of making men file-leaders successively, the files being but six deeps.</i>	73
45 <i>Of Countermarching Rankes to lose ground.</i>	50	70 <i>Of making men file-leaders successively, according to precedency, and dignity in file.</i>	74
46 <i>Of the Macedonian Countermarch by rank.</i>	ibid.	71 <i>Of making men file-leaders by Dignity, the files being but six deeps.</i>	75
47 <i>Of Countermarching Front and Reere, to the midst.</i>	51	72 <i>Of drawing the files againe into a body, and preparing them for skirmish.</i>	76
48 <i>Of bringing Front and Reere together into the midst by the Bastard Countermarch</i>	52	73 <i>Of firing by forlorne files, the manner, and the use.</i>	77
49 <i>A divisional Countermarch, to make a large Inteval, between the first and last rankes.</i>	ibid.	74 <i>Of firing by two rankes, ten paces advanced before the front: next turn with the front: and lastly, even with the half-files.</i>	79
50 <i>Of making a large Inteval between the first and last Rankes by the Macedonian Countermarch.</i>	53	75 <i>Of the Horne Battell how to make it, and to reduce it by firing.</i>	81
51 <i>Of interchanging the ground.</i>	54	76 <i>Of the Demy-hearse battell: the use of the figure, how to make it, and to reduce it by firing.</i>	82
52 <i>Of Countermarching the flankes (or wings) into the midst of the Battell.</i>	55	77 <i>Of giving fire, advancing by way of introduction, with the beneficiall use of the Bow and Pike.</i>	83
53 <i>Of Countermarching to take the ground before the flankes.</i>	56	78 <i>The way to make the Diamond battell several waies to fire upon it, with diverse other figures and firings which are thereby produced</i>	84
54 <i>Of Countermarching to take the ground on the outside of the flankes, and to direct their assaults inwards.</i>	ibid.	79 <i>Of the convex halfe Moone, the use of the Figure, and of the several waies of firing upon it.</i>	87
55 <i>Of taking the ground on the outside of the flankes, not altering the assaults.</i>	57	80 <i>Of extraduction: with severall uses, firings, and movements.</i>	89
56 <i>Of interchanging ground by the flankes, and bringing the innermost files of Pikes to become the outermost Rankes.</i>	58	81 <i>Of the broad fronted battell, with the waies of firing upon it.</i>	90
57 <i>Of Wheeling, their kinds, and uses, with their severall words of Command.</i>	59	82 <i>Of dismarching or firing in the hearse, the severall waies, and how they ought to be performed.</i>	91
58 <i>Of wheeling Anguler.</i>	59	83 <i>Of firings in flankes in generall, and more particularly, of the gathering fire.</i>	93
59 <i>Of wheeling on the Center</i>	61		84 The
60 <i>Of wheeling off by division.</i>	62		
61 <i>Of wheeling the front inward toward the reer</i>	ibid.		
62 <i>Of bringing the Flankes into the Front of the Battell.</i>	63		



# The Contents.

Chap.	Page	Chap.	Page
1 The second manner of giving fire to the flanke	94	the Center and Angles, the way to make the	
A firing in flank led off by the bringers up	95	Figure with a private Company: how to fire	
The differences between firing in flanke, mar-		upon it, and to reduce it.	123
ching, and of bringing the Muskettiers on the		107 Of the double Crosse battell, and severall	
side of the Pikes.	96	other formes from the ce proceeding.	124
Firing in flanke, and placing the Muskett-		108 Why it is necessary to know varieties of forms	
iers in the midst of the battell of Pikes: with		the way to make severall figures demon-	
rings from thence proceeding.	98	strated in this Chapter, with their Reduc-	
ing to the front & reer upon a march.	99	ments.	126
second way of firing to the front and reer.	100	109 The Trained Bands one of the three maine	
ing to the reer and right flanke marching	101	strengths of this Land the waies to make them	
ing to both flanks marching.	103	perfect Souldiers in handling of their Armes:	
ing to both flanks standing.	ibid.	The Checkr battell, with severall other	
single Wallers Triple firing to the front.	105	formes, either for a Company or Regiment.	129
ring Triparsite, doing execution to the		110 How a Captaine or superiour Commandr	
reer, and right flanke.	106	ought to be qualified: the use of variety of	
the Sconce Battell.	107	formes and figures of battell, with severall	
ring by three files at once; two of them		Regimentall formes that may be practised	
ing oblique, the other direct.	108	With a single Company, and the Reducements	
ing oblique, by foure files together, in			133
of a W.	109	111 Of the Musket and halfe Pike, with the se-	
the front Battell; the way to make, and		verall waies that have been tried to make the	
see it.	ibid.	Muskettiers defensible against the horse: as	
the Crosse battell how to make it with a		also ten queries objected, to the Halfe Pike	
to Company: the way to fire upon it,		and Muskets.	138
ther discourses, concerning the necessi-		112 The ten queries objected to the Musket and	
tying that figure: with the means to		halfe Pike fully answered. The halfe Pike joy-	
more defensive, and serviceable; and		ned with the Musket approved to be very use-	
the way to reduce it.	111	full, as having receiv'd approbation from di-	
the hollow fronted Crosse-battell, how		vers souldiers of great rank and quality.	142
it with a private Company: and the		113 Of the halfe Pike, how it may be serviceable	
fire upon it.	113	on all formes: with severall figures, indifferently	
ing upon the square Battell, flanked		useful to halfe Pike or Rest, with the postures	
lets.	114	of the halfe Pike and Muskets.	143
ancient manner of imbattelling the		114 The first dayes Exercise.	147
in: the placing of each Armes, and		115 The second dayes Exercise.	148
the Figure.	115	116 The third dayes Exercise.	150
103 Another hollow square forme.	116	117 The Fourth dayes Exercise.	153
104 Of the Hearse battell, and of the hollow		118 The fifth dayes Exercise.	157
Hearse and Crosse.	118	119 The sixth dayes Exercise.	161
105 Of the hollow square girded with shot.	120	120 Of the Brigade: the number and way of	
106 Of the solid square, with Muskettiers in		drawing up a Squadron. Next the comp-	
		sing three Squadrons into one Brigade. And	
		lastly, of imbattelling three Brigades, after	
		the manner of the King of Sweden.	163

# The Contents.

Chap.	Page	Chap.	Page
38 The conclusion of Doubling.	44	63 Of wheeling the Reere into the midst of the Battell.	90
39 Of Countermarches. The antiquity, and words of direction	45	64 Of wheeling the right flank, into the midst of the Battell.	91
40 Of the Chorean Countermarch: and the way to performe it.	46	65 Of wheeling the left flank into the midst of the Battell.	92
41 Of Countermarching to loose ground.	47	66 Of wheeling front and reere into the midst of the Battell.	93
41 Of Countermarches to gaine ground, or the Macedonian Countermarch.	48	67 Of wheeling the flanks into the midst of the Battell.	94
43 Of the Bastard Countermarch.	49	68 Of making men file-leaders successively bring eight deepe.	95
44 Of Countermarching Ranks, to maintaine ground.	ibid.	69 Of making men file-leaders successively bring but six deepe.	96
45 Of Countermarching Ranks to lose ground.	50	70 Of making men file-leaders successively according to precedency, and dignity.	97
46 Of the Macedonian Countermarch by rank.	ibid.	71 Of making men file-leaders by Division files being but six deepe.	98
47 Of Countermarching Front and Reere, to the midst.	51	72 Of drawing the files againe into a line preparing them for skirmish.	99
48 Of bringing Front and Reere together into the midst by the Bastard Countermarch.	52	73 Of firing by serlonne files, the most usefull.	100
49 A divisional Countermarch, to make a large Intell wall, between the first and last rank.	ibid.	74 Of firing by two ranks, ten paces before the front: next even with the lastly, even with the half-file.	101
50 Of making a large Interval between the first and last Rank, by the Macedonian Countermarch.	53	75 Of the Horne Battell how to make it, reduce it by firing.	102
51 Of interchanging the ground.	54	76 Of the Demy-battle: the measure, how to make it, and to reduce it.	103
52 Of Countermarching the flanks (or wings) into the midst of the Battell.	55	77 Of giving fire, advancing by way of Union, with the beneficiall use of the Pike.	104
53 Of Countermarching to take the ground before the flanks.	56	78 The way to make the Diamond battell waies to fire upon it, with diverse names and firing which are thereby produced.	105
54 Of Countermarching to take the ground on the outside of the flanks, and to direct their assaults inwards.	ibid.	79 Of the convex halfe Moone: the Figure, and of the several waies to use it.	106
55 Of taking the ground on the outside of the flanks, not altering the assaults.	57	80 Of extraduction: with severall names and movements.	107
56 Of interchanging ground by the flanks, and bringing the innermost files of Pikes to become the outermost Ranks.	58	81 Of the broad fronted battell, with the waies of firing upon it.	108
57 Of Wheeling, their kinds, and uses, with their severall words of Command.	59	82 Of dismarching or firing in the battell, the severall waies, and how they ought to be performed.	109
58 Of wheeling Anguler.	59	83 Of firing in flanks in generall, and more particularly, of the gathering fire.	110
59 Of wheeling on the Center.	61		
60 Of wheeling off by division.	62		
61 Of wheeling the fronts inward toward the reere.	ibid.		
62 Of bringing the Flanks into the Front of the Battell.	63		

# The Contents.

Chap.	Page	Chap.	Page
84 The second manner of giving fire to the flanke	94	the Center and Angles, the way to make the Figure with a private Company: how to fire upon it, and to reduce it.	123
85 A firing in flank led off by the bringers up	95	107 Of the double Crosse battell, and severall other formes from the ce proceeding.	124
86 The differences between firing in flanke, marching, and of bringing the Muskettiers on the outside of the Pikes.	96	108 Why it is necessary to know varieties of formes the way to make foue severall figures demonstrated in this Chapter, with their Reducements.	126
87 Of firing in flanke, and placing the Muskettiers, in the midst of the battell of Pikes: with their firings from thence proceeding.	98	109 The Trained Bands one of the three maine strengths of this Land the waies to make them perfect Souldiers in handling of their Armes: The Checkr battell, with severall other formes, either for a Company or Regiment.	129
88 Of firing to the front & rear upon a march.	99	110 How a Captaine or superiour Commandr ought to be qualified: the use of variety of formes and figures of battell, with severall Regimentall formes that may be practised With a single Company, and the Reducements.	133
89 A second way of firing to the front and reere.	100	111 Of the Musket and halfe Pike, with the severall waies that have been tried to make the Muskettiers defensible against the horse: as also ten queries objected, to the Halfe Pike and Muskets.	138
90 Firing to the reere and right flanke marching	101	112 The ten queries objected to the Musket and halfe Pike fully answered. The halfe Pike joynd with the Musket approved to be very usefull, as having receiv'd approbation from divers souldiers of great rank and quality.	147
91 Firing to both flanks marching.	103	113 Of the halfe Pike, how it may be serviceable on all formes: with severall figures, indifferently useful to halfe Pike or Rest, with the postures of the halfe Pike and Musket.	143
92 A firing to both flanks standing.	ibid.	114 The first dayes Exercise.	147
93 Captaine Wallers Triple firing to the front.	105	115 The second Dayes Exercise.	148
94 A firing Tripartite, doing execution to the front, reere, and right flanke.	106	116 The third dayes Exercise.	150
95 Of the Sconce Battell.	107	117 The Fourth dayes Exercise.	153
96 Of firing by three files at once; two of them standing oblique, the other direct.	108	118 The fifth dayes Exercise.	157
97 A firing oblique, by foure files together, in forme of a W.	109	119 The sixth dayes Exercise.	161
98 Of the front Battell; the way to make, and to reduce it.	ibid.	120 Of the Brigade; the number and way of drawing up a Squadron, Next the composing three Squadrons into one Brigade. And lastly, of imbattelling three Brigades, after the manner of the King of Sweden.	163
99 Of the Crosse battell how to make it with a private Company: the way to fire upon it, with other discourses, concerning the necessities inforcing that figure: with the means to make it more defensive, and serviceable; and lastly, the way to reduce it.	111		
100 Of the hollow fronted Crosse-battell, how to make it with a private Company: and the way to fire upon it.	113		
101 Of firing upon the square Battell, flanked with Pikes.	114		
102 Of the ancient manner of imbattelling the Plinthium: the placing of each Armes, and the use of the Figure.	115		
103 Another hollow square forme.	116		
104 Of the Hearse battell, and of the hollow Hearse and Crosse.	118		
105 Of the hollow square girdled with shot.	120		
106 Of the solid square, with Muskettiers in			

FINIS.